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CONTENTS AND SUBJECT INDEX

EDITORIALS:

Present Status of Proposed Sickness Insurance Laws for California—Two Interim Committees.....	55
Constructive Program for Medical Care—Recent Platform Adopted by A.M.A. Trustees and A.M.A. Council on Medical Service and Public Relations	56
E.M.I.C.—As Per Federal Children's Bureau Outlook	56
A "Doctor's Guild" Organized in San Francisco	57
"Bulletin" of the Alameda County Medical Association	58
Letter from President Philip K. Gilman—Re: Woman's Auxiliary.....	58

EDITORIAL COMMENT:

Poliomylitis From Fly-Contaminated Food. W. H. Manwaring, Stanford University	59
In Vivo Inhibition in Antibiotics. W. H. Manwaring, Stanford University	59
Principles on Health Insurance, California Medical Association.....	61
Constructive Program for Medical Care—American Medical Association—14 Principles	62

SCIENTIFIC AND GENERAL:

Some Observations on Deficiency Disease With Special Reference to Thiamin. James F. Rinehart, and Louis D. Greenberg, San Francisco	63
Lumbosacral Subarachnoid Block. C. Eugene Schuetz, Los Angeles.....	64
Public Health Bacteriology. J. C. Geiger, San Francisco.....	65
Free Enterprise and the Doctor. Paul A. Ferrier, Pasadena.....	67

SYMPOSIUM ON DISEASES OF THE LIVER:

The Rôle of the Gallbladder in Disease of the Liver. William C. Boeck, Los Angeles	69
Infections of the Liver With Special Reference to Amebiasis. L. A. Alessen, Los Angeles.....	73
Portal Cirrhosis. Capt. A. M. Snell (MC) U.S.N.R., Oakland.....	74
The Status of the Liver and Its Importance to the Surgeon. Philip J. Cunnane, Los Angeles.....	78
The Use of Products of Fibrinogen and Thrombin in Otolaryngology. Capt. Harry P. Schenck (MC), U.S.N.R., Oceanside	80

STATE ASSOCIATION ACTIVITIES:

California Medical Association Department.....	82
Minutes: C.M.A. Executive Committee (193rd Meeting, Held June 8, 1945).....	82
Minutes: C.M.A. Executive Committee (194th Meeting, Held June 24, 1945).....	82
Proposed Amendment to the Constitution.....	83
County Societies: Membership; In Memoriam.....	83
Committee on C.M.A. Participation in the War Effort	84
Committee on Public Policy and Legislation.....	86
Committee on Hospitals, Dispensaries and Clinics	88
Committee on Postgraduate Activities.....	93
C.M.A. Cancer Commission.....	94
Committee on Industrial Practice.....	94
California Physicians' Service.....	96
Committee on Health and Public Instruction.....	98

MISCELLANY:

News	99
Press Clippings (Medical)	101
Medical Jurisprudence	103
Letters	103
Twenty-Five Years Ago	106
Board of Medical Examiners of the State of California	106
California Medical Directories.....	Adv. pages 2, 4
Books Received	Adv. page 7

ADVERTISEMENTS:

Index	Adv. page 8
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Leaflet Regarding Rules of Publication.—CALIFORNIA AND WESTERN MEDICINE has prepared a leaflet explaining its rules regarding publication. This leaflet gives suggestions on the preparation of manuscripts and of illustrations. It is suggested that contributors to this Journal write to its offices requesting a copy of this leaflet.

DEPARTMENT INDEX

(Itemized Index of Articles is printed on Front Cover)

Editorials	55
Editorial Comment	59
Original Articles: Scientific and General	63
California Medical Association Department	82
Minutes: C.M.A. Executive Committee	82
Proposed Amendment to the Constitution	83
County Societies: Membership; In Memoriam	83
Committee on War Effort Participation	84
Committee on Public Policy and Legislation	86
Committee on Hospitals, Dispensaries and Clinics	88
Committee on Postgraduate Activities	93
C.M.A. Cancer Commission	94
Committee on Industrial Practice	94
California Physicians' Service	96
Committee on Health and Public Instruction	98
Miscellany: News	99
Press Clippings (Medical)	101
Medical Jurisprudence	103
Letters	103
Twenty-Five Years Ago; State Examining Board	106

EDITORIALS

PRESENT STATUS OF PROPOSED SICKNESS INSURANCE LAWS FOR CALIFORNIA —TWO INTERIM COMMITTEES

California Senate and Assembly Appoint Interim Committees to Study Sickness Insurance.

—When the 56th California Legislature adjourned on June 16, last, two major compulsory sickness insurance bills (Governor Warren's A.B. 800 and C.I.O.'s A.B. 449) were not placed on the Governor's desk, because each failed of passage in the Assembly where they originated, thereby preventing subsequent consideration by the State Senate and the Governor.

However, even though the much discussed measures failed to secure legislative approval, two other resolutions closely related to sickness insurance,—one by the State Senate and the other by the State Assembly,—secured favorable consideration by their respective bodies. The resolutions authorized two Interim Committees, one composed of seven Assemblymen with an appropriation of \$50,000.00, and the other of five Senators, with allocation of \$20,000.00, the allocations being intended to cover investigation costs of voluntary and compulsory sickness insurance systems in our own and other States. Scope of the measures providing for the interim committees may be gleaned by reading the text of the two resolutions. (In the July issue of CALIFORNIA AND WESTERN MEDICINE, the Senate Resolution appears on page 22 (Item VII), the Assembly Resolution on page 29 (Item XII).)

Members of the California Medical Association may well pause to consider in advance the possible significance of interim committee investigations as outlined in the two resolutions, and the results of the reports that may be submitted. If either the Assembly or Senate Committee, or both, submit to the next Legislature a bill or bills in advocacy of a compulsory sickness insurance system for California, it will mean a legislative battle even more tense than that which took place during the first six months of the present year. This patent fact should be understood by all physicians.

* * *

Physicians Must Continue Their Campaign of Education.—Many phases of this year's legislative struggle over sickness insurance plans have been given space in the OFFICIAL JOURNAL, and all signs indicate that much more comment must be made thereon.

It is to be hoped that component county socie-

ties and all members of the California Medical Association will appreciate the importance of the issues at stake in relation to medical practice in the future.

Every physician should keep abreast of the subject, and when opportunity permits, communicate his views to friends and patients. In that way, support will be given when citizens go to the voting booths to cast their ballots for legislators or initiative measures.

CONSTRUCTIVE PROGRAM FOR MEDICAL CARE—RECENT PLATFORM ADOPTED BY A.M.A. TRUSTEES AND A.M.A. COUNCIL ON MEDICAL SERVICE AND PUBLIC RELATIONS

An Important Announcement.—In Chicago, on June 22, 1945, at the close of a joint meeting, the Trustees of the American Medical Association and the A.M.A. Council on Medical Service and Public Relations publicized an important statement on 14 principles involved in medical care. A full page presentation of the platform, presented in this issue of CALIFORNIA AND WESTERN MEDICINE on page 62, should be read.

In connection with that pronouncement, it is heartening to read the minutes of the A.M.A. Council on Medical Service and Public Relations as given in the *J.A.M.A.*, issue of July 21, 1945, on page 889, and to note not only the wide range of important topics then considered, but especially the aggressive spirit manifested by the Council, and the actions taken. If the proposals that were approved are properly implemented, it will mean that our national organization,—American Medical Association—will be brought into a much-to-be-desired closer and more sympathetic contact with its constituent state associations and their component county societies.

The funds of our national organization can be spent to no better advantage, than when wisely expended to promote a broad educational campaign among its state units,—through a program that will make for a clearer understanding by physicians throughout the Union, concerning best ways and means of providing adequate medical care for all citizens, with special reference to voluntary sickness insurance plans, and other measures that are in harmony therewith.

Since the American Medical Association, speaking for the physicians of the United States, has now announced 14 principles to be observed in a "constructive program for the extension of improved health and medical care for its people," it is incumbent upon the governing bodies of each constituent state association to give the same careful consideration, and to notify the A.M.A. authorities, if they are not in agreement therewith. Otherwise the principles will stand as the expression of opinion held by the profession.*

* * *

Component County Societies Should Study the 14 Principles.—Each of our County Societies, in order to bring the subject before its

members might appoint, say, a committee of three, to prepare a paper with brief comment on each of the 14 principles, the subject to be then thrown open for further general discussion and elucidation. In this way, physicians in their own minds, would clarify the various factors, and thus be better prepared to discuss the subject with individual lay friends or groups. Through such procedure it should be possible to bring an increasing number of voters into harmonious affiliation with the medical profession, particularly when adverse legislation is proposed. By now, it must be evident to all who observe trends, that the proponents of theoretical compulsory sickness plans are more than active in the promotion of their compulsory sickness plans and obsessions, not only in one or two but nearly all the States of the Union, as well as in the Federal Congress in Washington. The medical profession must meet its responsibilities and orient citizens concerning the issues involved.

E.M.I.C.—AS PER FEDERAL CHILDREN'S BUREAU OUTLOOK

E.M.I.C. Since March 29, 1943.—CALIFORNIA AND WESTERN MEDICINE in its issue of June, 1943 (p. 315) began a series of comments and articles on E.M.I.C. (Emergency Maternity and Infant Care) with which program nearly all obstetricians and physicians in general practice, by now, should have had considerable experience. Much of the comment was of an adverse or critical nature—not because of the basic objective of giving to wives and infants of enlisted men all possible and best maternity and pediatric care—but because of the empiric, and in a certain sense, high-handed rules and regulations put forth by the Federal Children's Bureau of the United States Department of Labor.

Information Circular No. 13 of March 29, 1943, listed the conditions under which State Health Departments would be given Federal monies to aid in carrying on the professional services required. The first congressional appropriation or subsidy or grant to carry on the E.M.I.C. work in the different States was for \$1,200,000. That the Federal Children's Bureau officials (Miss Katharine Lenroot, chief; Dr. Martha M. Eliot, associate chief; and others) failed somewhat to sense the bigness of the problem then confronting them is shown by the Federal deficiency and other appropriations subsequently granted; the expense of the work (exclusive of many heavy administrative costs covered by State Boards of Health from State funds) now approximating some \$70,000,000.

The initial proposal by the Children's Bureau officials was that \$35.00 per patient would be ample compensation to a physician for the extensive pre-natal, confinement, and post-natal care to mother and child! The California Medical Association committee insisted that the fee must be at least \$50.00 per case and because of its firmness on this point, that is practically the fee today throughout the United States.

* Too late for comment: C.M.A. Principles (see p. 61).

Articles on E.M.I.C. in Lay Press.—Since March, 1943, physicians who have been interested in the E.M.I.C. program and procedures have had opportunity to read many articles and comments thereon, in both medical and lay press.

A display article in *Collier's* of August 4, 1945 (p. 18) with caption "Babies for Free," written by a lay contributor is the reason for the present remarks. Throughout that article, praise, outspoken or implied, is given in generous quantity to the Federal Children's Bureau and its administrative chiefs. Perusal of the article by lay persons not informed concerning the real facts could easily leave the impression that the big donation in the E.M.I.C. program was by the Federal Government, acting through the Federal Children's Bureau.

As a matter of fact, the major donation has been made by the thousands of physicians who, in loyalty to our Country, and working in conjunction with State Boards of Health and Local Health Officials, have made the service possible.

Some of the battles over bureaucratic directives between State Medical Society committees and the Federal Children's Bureau have been referred to in past issues of *CALIFORNIA AND WESTERN MEDICINE* and other medical journals, and no special reference need be made thereto at this time.

* * *

Appreciation Would Be In Order.—It would have been a gracious expression of understanding and appreciation by the officials of the Federal Children's Bureau,—when they were interviewed for the article in *Collier's*,—had they impressed upon the author that some words of praise would be in order for the thousands of medical men and women who have made the E.M.I.C. program a success.

The bigness of the donation by physicians is evidenced by the estimate that some 1,500,000 mothers and babies will have received care through E.M.I.C.

The article in question bears out the comment made by more than one medical commentator, that papers and other promulgations emanating during recent years from the offices of the chiefs of the Federal Children's Bureau indicate a distinct leaning to the left, with long-range thought on their programs to promote legislation of the Wagner-Murray-Dingell type.

Of course, it is the privilege of such officials to so think and hold, if such be their beliefs or desires. However, it is well for members of the medical profession to understand the situation.

* * *

Some Excerpts.—For convenience of readers, a few brief excerpts from the *Collier's* article referred to above, follow:

* * *

Katharine F. Lenroot, head of the Children's Bureau, expressed the spirit of the thing this way: "There is one casualty which no responsible nation should ask a fighting man to face. That casualty is the preventable injury of his wife or child back home."

* * *

The program is under the direction of Doctor Martha

M. Eliot, associate chief of the Children's Bureau but state health departments, and not the federal government, administer it locally. The States receive E.M.I.C. funds from the Children's Bureau and pay them out in check to doctors, hospitals and nurses. The cost so far has been almost \$70,000,000. The only federal string attached is that participating hospitals and doctors must meet minimum requirements set by the Children's Bureau.

Many doctors who cheerfully accept E.M.I.C. because there's a war on, would kick mightily if anybody attempted to extend it after the war. They say that the fee—\$50 for a general practitioner—is too low. And they object to being checked up on by E.M.I.C. administrators as to the number of visits and kind of care.

Such objections do not come up, however, at group practice clinics, where doctors either work on salary or receive their share of income, and where the clinic itself sees to it that standards are maintained.

As an E.M.I.C. administrator says, "A doctor may vote one way at his medical society meeting, and then, when he is confronted with an individual woman who needs his help, act quite another way, forgetting all about politics and doing all he can to help her."

Although the E.M.I.C. program is a purely wartime measure, due to end six months after peace, its findings will be important to the nation and to Congress in developing postwar health plans. Partly because of E.M.I.C. experience, many new provisions for maternity and child care are included in the national health insurance section of the revised Wagner Social Security bill, now before Congress.

A "DOCTOR'S GUILD" ORGANIZED IN SAN FRANCISCO

Members of Southern Pacific Hospital Staff Organize.—A new medical organization that may be an advance expression of similar movements throughout the United States was given recent newspaper publicity. From the San Francisco *News* of August 3, the following excerpt:

DOCTORS BAND INTO GUILD

Organizations of a guild of 40 doctors and dentists on the staff of Southern Pacific Hospital to act in the mutual interests of the profession was announced here yesterday.

A Spokesman of the organization declared emphatically the group is not a union, but admitted one of its concerns would be maintenance of good working conditions, which might eventually include wages and hours.

The group will not be affiliated with any labor organization, but will act solely for professional men connected with the S. P. Hospital.

The guild is believed to be the first such organization of doctors and dentists in the United States. . . .

Delegates who were present at the Special Session of the California Medical Association held in Los Angeles on January 4-6, 1945, may recall Resolution No. 11 introduced by Dr. Daniel W. Sooy of San Francisco, in which possible formation of a "guild" was mentioned. Resolution No. 11 (not adopted) as it appears in the minutes of the C.M.A. House of Delegates, follows:

RESOLUTION No. 11

Be it Resolved, That a guild of the licensed physicians and surgeons of the State of California be formed to

function as a guild under by-laws similar to or acceptable to organized labor with the express desire that a guild thus formed have its fee schedule accepted by organized labor so that should legislation now pending infringe upon the rights of the medical men as governed by the above-described fee schedules, then this guild could affiliate with the two branches of organized labor to further the practice of medicine in the State of California.

Concerning comment on the above, it is possible that the publicity given to the Association of American Physicians and Surgeons of Gary, Indiana, may have had somewhat to do with the organization of the San Francisco Guild. (For reference to A.A.P.S., see CALIFORNIA AND WESTERN MEDICINE, for April, page 234.)

That such a movement should have taken definite form is an indication of the trend of thought by many well-known members of the medical profession. (For press items in this issue, see p. 102.)

"BULLETIN" OF THE ALAMEDA COUNTY MEDICAL ASSOCIATION

Vol. I, No. 1 of *The Bulletin of the Alameda County Medical Association*, is a 6 x 9 publication of 40 pages. In format and contents this first issue of August, 1945, is a distinct credit to Editor Milton H. Schutes, M.D., Executive Secretary Rollen W. Waterson and their associates.

From the opening editorial the following excerpts will reveal somewhat of the story of this welcome addition to the group of the other excellent bulletins of C.M.A.'s component county societies. The OFFICIAL JOURNAL of the California Medical Association extends all good wishes.

Excerpts follow:

"GOOD MORNING DOCTOR!"

"Meet the new member—THE BULLETIN of the Alameda County Medical Association!

"Examine it critically. It is Volume I, Number 1, and is already sitting quite pretty, thanks to its business management. It is its own prediction of a never ending line of volumes. Don't be in a hurry to ease it into your wastebasket. It may some day become a valued collectors' item!

"THE BULLETIN will come to you once a month, along with your office bills, loaded from front to back cover with information of interest; most of it factual, some of it debatable, a little of it humorous and gossipy, with possibly a bit of detritus now and then.

"Its overall purpose is to keep you informed of what your association is doing and of what your officers and committeemen are thinking and planning. More specifically, each issue will include the minutes of the association and its council and committees, the president's message, notices from the recording secretary and the executive secretary, a calendar of meetings of the association and of hospital staffs, editorials by members of the editorial board, a column for you in which to cheer or gripe or otherwise expose yourself, a column for the Bureau of Medical Economics, one for hospital news, one for the Woman's Auxiliary, and another for vital statistics from the city and county health departments, and only very occasionally, we hope, one for obituaries. . . .

"THE BULLETIN will serve not only as a bill-board for the association, but also for a carefully selected group of commercial firms in trimutual benefit. Their advertisements will be conveniently placed for your easy informative inspection.

"Your general approval is anticipated, Doctor. But, whether it be a little boutonniere or a big bronx-cheer, this new member, like the meandering brook, will go on—and it could be, forever."

WOMAN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION

Letter from C.M.A. President Philip K. Gilman

To the Members of the California Medical Association:

In the past year, particularly the first half of 1945, it has been the pleasure of the officers of the C.M.A. to come into a more frequent and closer contact with the Woman's Auxiliary to the California Medical Association than we have enjoyed in recent war years. During the course of this contact I have had a good chance to evaluate the work of the Auxiliary and to assess the function which this organization has played and can play in furthering the ends of scientific medicine.

In my opinion, the Woman's Auxiliary is one of the finest instruments the medical profession has for the advancement of our aims. Unfortunately, the Auxiliary has not always been extended the leadership necessary to achieve its full potential; unfortunately, in some areas the Auxiliary is looked upon as an extraneous growth or is merely tolerated by the busy doctors in the medical society. In one or two spots there has even been some antagonism toward the formation of county auxiliary units.

The busy women who make up the Woman's Auxiliary are working for the good of their husbands. They are willing to devote endless time and boundless energy in carrying out the aims and ideals of their husbands' medical organizations. In short, they represent a tremendous resource which I fear we may have overlooked in past times.

Let us now acknowledge the good work the Woman's Auxiliary has done in the past. And let us now determine that this good work will be carried on and expanded in the future. Let us encourage our good wives in their efforts to help us in our profession. If the Auxiliary unit in your county is not functioning actively, lend some aid; supply some leadership. If there is no unit in your county, or if the unit is temporarily dormant, get behind it.

Let your wives in on your organization problems; you may be surprised at how much help they can give you. Ask them to your meetings, particularly when problems of medical economics are to be discussed. See that they are enabled to meet regularly, to hear qualified speakers and to take an active part in the social and economic side of medical practice. Their energies and accomplishments will repay you manifold for the little effort it will take on your part to extend a helping hand.

The California Medical Association has recently gone through a period of great economic and political stress. The temporary lull right now will again be replaced by even greater demands on our members if scientific, ethical private medical practice is to survive. In the task ahead of us there is a vital job that the Woman's Auxiliary can do. And it will do this job, or any other we ask, if we will only point the way and supply the encouragement.

Let's get behind the Woman's Auxiliary to the fullest and harness the great power residing in its members. Released, this power will do tremendous good for the medical profession.

PHILIP K. GILMAN, M.D., President.

I don't know who my grandfather was; I am much more concerned to know what his grandson will be.—Abraham Lincoln. (*Gross, Lincoln's Own Stories*, p. 12.)

EDITORIAL COMMENT[†]

POLIOMYELITIS FROM FLY-CONTAMINATED FOOD

Evidence has accumulated within recent years that the alimentary tract may be one of the most important portals of entry for poliomyelitis virus. The virus has been repeatedly demonstrated in human stools, in sewage and in flies collected in epidemic areas. Fly-contaminated food may thus be a theoretically logical source of human infection with polio virus. Experimental evidence in support of this hypothesis is reported by Ward¹ and his associates of the Section of Preventive Medicine, Yale University School of Medicine.

The evidence was drawn mainly from the 1944 poliomyelitis epidemic in Catawba County, North Carolina. This outbreak was rural in character. Most of the affected families were of the lower income group, hygienic conditions poor, and outdoor privies the rule. The weather was hot and flies abundant. Foods were exposed in 20 homes of poliomyelitis patients within a week of the onset of the disease. The food was purchased locally and consisted of bananas. These were peeled and sliced on the spot, and sprinkled with a little sugar and water. About half of the food samples were supplanted by fly-bait, consisting of liver or fish, likewise obtained locally. One or two plates of this food were exposed for 24 to 48 hours in or about each home. These were usually placed in the kitchen, on the back porch or under a fly-trap in the yard. At the end of the exposure the food was frozen on dry ice, transported to the laboratory and held in a frozen state until used for feeding experiments. In most instances flies were observed to rise from the food at the time of collection. There was gross evidence of fly-contamination in the form of vomit or fecal spots. Of the flies trapped at the time of exposure, 80 per cent have been identified as *Musca domestica*.

Chimpanzees were selected as the test animals. Howe and Bodian² of Johns Hopkins University had previously shown that chimpanzees are extremely susceptible to orally administered poliomyelitis virus, producing both paralytic and non-paralytic infections in these animals. In non-paralytic cases large amounts of the virus are given off in the stools. The only recognizable symptom is fever of moderate intensity (101°F.). This viral enteritis is followed by specific antibody production.

Under strictest quarantine conditions two chimpanzees were each fed approximately one quart of fly-contaminated bananas daily for from 6 to 10 days. Rectal temperatures were taken daily, and daily stool specimens collected. The

stools prepared by ultracentrifugation³ were tested for virus by intracerebral inoculation into rhesus monkeys.

The pre-feeding stool specimens of both animals gave negative tests for poliomyelitis virus. Three or four separate stool specimens from each animal taken during the post-feeding period gave positive tests for polio virus, producing typical fever, paralyses, and cord and medulla lesions in test monkeys. With each chimpanzee the virus persisted for several weeks after the last contaminated feeding. Both chimpanzees thus acquired a subclinical infection (or carrier state) with apparent multiplication of the virus in the intestinal tract.

From these data Ward concludes that fly-contamination of food in epidemic areas is presumably an important method of spread of poliomyelitis virus to human beings. He plans testing this conclusion by reduction of the number of flies in a selected locality during some future epidemic.

P. O. Box 51.

W. H. MANWARING,
Stanford University.

REFERENCES

1. Ward, R., Melnick, J. L., and Horstmann, D. M. Science, 101:491 (May 11), 1945.
2. Howe, H. A., and Bodian, D., J. Exp. Med., 80:383, 1944; 81:255, 1945.
3. Melnick, J. L., J. Exp. Med., 77:195, 1943.

IN VIVO INHIBITION IN ANTIBIOTICS

In 1943 Schatz¹ and his associates of the New Jersey Agricultural Experiment Station isolated streptomycin from broth cultures of *Actinomycetes griseus*. The new antibiotic was found to be active both in vitro and in vivo against a large number of both gram-positive and gram-negative microorganisms. Robinson² and his associates of the Merck Institute for Therapeutical Research afterwards found streptomycin to be relatively non-toxic for mice and rabbits and superior to streptothrin in its therapeutic efficiency against experimental gram-negative infections of these animals. They suggested its use in human medicine as a supplement to penicillin, which is inactive against typhoid fever, bacillary dysentery and other gram-negative diseases.

A preliminary report of the clinical application of streptomycin to the treatment of typhoid fever patients is currently made by Elias and Durso³ of the Wyeth Institute of Applied Biochemistry, Philadelphia. A technique for the titration of streptomycin was first developed by these biochemists. This was based on the method proposed by Foster⁴ for the titration of streptothrin, *B. subtilis* being used as the test organism. They found that an old laboratory culture of *E. typhosa* was sterilized by the addition of 2 Foster units of streptomycin per cc. of serum-broth. Recently isolated typhoid cultures were found to be slightly more resistant. All, however, were killed by 6 units of streptomycin per cc. of serum-broth.

[†] This department of CALIFORNIA AND WESTERN MEDICAL presents editorial comments by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California Medical Association to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

Daily doses of streptomycin ranging from 1 million to 4 million units given as divided doses at 3 hour intervals were then administered intramuscularly or intravenously without apparent toxic reactions to several typhoid patients. Urinary excretion was demonstrable within 90 minutes after the first fractional dose and was completed within 72 hours after the final dose, from 44 to 70 per cent of the total administered dose being recovered from the urines of different patients. A peak serum level (28 units per cc.) was reached within a few hours after the first dose. The serum titer fell to zero within 24 hours after the last dose. Four million daily units given by the intravenous route gave rise to a concentration of from 100 to 130 units per gram of fresh feces.

Given by mouth, four million daily units produced no demonstrable blood level, and only 1 per cent total recovery from the urine. At least 64 per cent of the oral dose was eliminated in the stools, the stool titers often reaching as high as 20,000 units per gram of feces. Positive stool cultures of *E. typhosa* were isolated from patients after prolonged oral therapy with as much as 15 million units of streptomycin. The organisms thus isolated showed no acquired resistance to streptomycin, all being killed by 6 units of streptomycin per cc. of serum-broth.

Bearing in mind the enormous dosage administered in these patients, and the lack of acquired streptomycin resistance, Elias concludes that some effective inhibitory substance for streptomycin exists in the intestinal contents. If so, streptomycin would be without theoretical promise as an intestinal antiseptic against gram-negative infections. Its only theoretically predictable therapeutic value would be against the bacteremia which usually accompanies typhoid infections. Detailed report of its clinical value against this phase of typhoid fever is promised for the near future.⁵ Meanwhile the reported data may serve a useful purpose in emphasizing the existence of strong inhibitory factors in the human body, which have often been overlooked in the exploitation of such commercial products as bacteriophage and leucocytic extract.⁶

A second recent example of such inhibitory factors is currently reported by Klein and Stevens⁷ of the Department of Bacteriology, University of Pennsylvania. These investigators compared the *in vitro* and *in vivo* effects of 20 detergents and related compounds against influenza A virus. Seven of these were found to be virucidal *in vitro* when tested in dilutions often as high as 1:16000, sterilization being completed within from 60 seconds to ten minutes. However, none of these compounds when administered intranasally as a 5 to 10 per cent solution either by instillation or by prolonged spray (18 to 120 minutes) protected mice against experimental infection with influenza A virus.

The results clearly show that in spite of the high *in vitro* activity of many of these compounds they are completely inert *in vivo* even under optimal conditions of prophylaxis. The utilization

of such compounds as gargles or sprays for human prophylaxis against influenzal infections would be of questionable value.

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Strümpel-Marie Disease

Adolph Strümpel (1853-1925), in the second volume of the first edition of his *Lehrbuch* (Leipzig, 1884, page 152), described this peculiar form of chronic arthritis. A portion of the translation follows.

"Those forms may here be mentioned in passing as a remarkable and, as it seems to us, a distinct disease in which there results a gradual and painless complete ankylosis of the vertebral column and hip joints so that the head, the trunk and the thighs are firmly united to each other and become completely stiff, while all the other joints retain their normal mobility. It is apparent that a characteristic modification of the posture and gait must occur as a result. We have seen two quite similar cases of this peculiar disease."

He discusses the entity in more detail in an article, "Bemerkung über die chronische ankylosirende Entzündung der Wirbelsäule und der Hüftgelenke. [A note on Chronic Ankylosing Inflammation of the Vertebral Column and Hip Joints]." It was published in the *Deutsche Zeitschrift für Nervenheilkunde* (11:338-342, 1897) as a comment on the preceding article on the same subject by Bechterew.

Pierre Marie (b. 1853) wrote "Sur la spondylose rhizomélique, [Rhizomelic Spondylosis]" in the *Revue de Médecine* (18:285-315, 1898). A portion of the translation follows:

"In the session of February 11 of this year, I presented to the Société médicale des Hopitaux two patients afflicted with a disease whose symptoms, identical in both cases, seemed to me to be sufficiently interesting to be brought to the attention of clinicians. In this preliminary discussion, I indicated the principal characters of this disease entity and particularly stressed the extremely marked rigidity of the spine and the more or less complete ankylosis of the coxofemoral and scapulohumeral joints. Calling attention to the fact that the articulations of the roots of the extremities were affected with this kind of spinal rigidity, I proposed to designate it by the name *rhizomelic spondylosis*." . . .

After a careful review of the facts observed in his cases, he concludes:

"It seems to me that it is permissible for clinicians to contrast deforming polyarthritis affecting the small joints of the extremities (acromelic deforming polyarthritis) with the ankylosing process that attacks primarily the spine and the joints at the roots or attachments of the extremities (rhizomelic spondylosis)." —R. W. B., in *New England Journal of Medicine*.

**PRINCIPLES ON HEALTH INSURANCE
CALIFORNIA MEDICAL ASSOCIATION**

These principles were adopted by the California Medical Association Council on August 12, 1945

It is in the public interest that the California Medical Association, representing the doctors of medicine practicing their profession in the State of California, publicly make known the principles which should form the basis of any health insurance program, and from which there should be no material deviation if the public welfare is to be properly and adequately protected. The public health and good medical practice are inextricably interwoven and interdependent.

This statement is made with the understanding that the public is entitled to the best possible quality of medical service and access thereto. The medical profession must be in a position to render such service if the best interests of the public are to be served.

The manifold and constant advances in the science and practice of medicine are put to public benefit only when they can be utilized by an alert and progressive medical profession. The public is entitled to profit by all scientific advances and the public welfare demands that the medical profession have complete scientific freedom in their application.

Principles

Any sound health insurance program should fulfill each of the following basic points:

1. It is of primary importance that the people should be enabled to provide for the costs of illness on a regular budget basis during periods of good health and stable earning power, so that they may have a medical-economic security. It is vital, however, that the distribution of costs should be undertaken in a manner which will still guarantee the finest possible medical care and which will prevent any deterioration in the quality of medical service.

2. To serve the ultimate public interest any health insurance plan must:

- a. Be voluntary and not compulsory in nature,
- b. Retain individual initiative in medical practice, so that the incentive for further advance in scientific medicine may continue,
- c. Fully protect the freedom of choice, both of the patient in choosing a physician and of the physician in choosing his community, type of practice and professional procedures,
- d. Offer medical care in coöperation with allied services against serious illness or injury,
- e. Offer participation at a cost within the means of all employed persons and income-receiving families, and
- f. Provide a fair reward to those rendering the service which will give continued stimulus to scientific medical development and sound medical practice.

3. The function of state government should be to encourage voluntary health insurance programs but not regiment the patient and the medical profession or operate compulsory health insurance plans established by political means; to further this function, the state should coöperate with medical and allied professional groups to provide the availability of medical and associated care through acceptable prepayment plans in areas where a shortage of medical and hospital facilities exists.

4. It is in the public interest that the human factor in medical care be thoroughly recognized; the sanctity of the patient-physician relationship must be maintained and the method of providing medical care must not become enmeshed in bureaucratic red tape and a system of tickets, coupons, questionnaires and other political controls and delays.

5. It is essential for the public welfare that there exist in each state a complete inventory of all medical resources and facilities. It is in the public interest that a coherent and comprehensive educational program be undertaken, preferably by responsible authorities and the medical profession in a coöordinated effort, to advise all the people of the state on the facilities and services available to them in the event of need and to encourage sound public health measures for the prevention of both accidental and non-accidental illnesses and injuries.

6. There should be a coöordinated program on the part of all groups concerned with this problem, directed to the extension of voluntary health insurance plans, so that our people may systematically provide for their health care on a budget basis.

CONSTRUCTIVE PROGRAM FOR MEDICAL CARE AMERICAN MEDICAL ASSOCIATION

This platform was adopted by the Council on Medical Service and Public Relations and the Board of Trustees of the American Medical Association on June 22, 1945.

Preamble

The physicians of the United States are interested in extending to all people in all communities the best possible medical care. The Constitution of the United States, the Bill of Rights and the "American Way of Life" are diametrically opposed to regimentation or any form of totalitarianism. According to available evidence in surveys, most of the American people are not interested in testing in the United States experiments in medical care which have already failed in regimented countries.

The physicians of the United States, through the American Medical Association, have stressed repeatedly the necessity for extending to all corners of this great country the availability of aids for diagnosis and treatment, so that dependency will be minimized and independence will be stimulated. American private enterprise has won and is winning the greatest war in the world's history. Private enterprise and initiative manifested through research may conquer cancer, arthritis and other as yet unconquered scourges of humankind. Science, as history well demonstrates, prospers best when free and unshackled.

Program

The physicians represented by the American Medical Association propose the following constructive program for the extension of improved health and medical care to all the people:

1. Sustained production leading to better living conditions with improved housing, nutrition and sanitation which are fundamental to good health; we support progressive action toward achieving these objectives;
2. An extended program of disease prevention with the development or extension of organizations for public health service so that every part of our country will have such service, as rapidly as adequate personnel can be trained.
3. Increased hospitalization insurance on a voluntary basis.
4. The development in or extension to all localities of voluntary sickness insurance plans and provision for the extension of these plans to the needy under the principles already established by the American Medical Association.
5. The provision of hospitalization and medical care to the indigent by local authorities under voluntary hospital and sickness insurance plans.
6. A survey of each state by qualified individuals and agencies to establish the need for additional medical care.
7. Federal aid to states where definite need is demonstrated, to be administered by the proper local agencies of the states involved with the help and advice of the medical profession.
8. Extension of information on these plans to all the people with recognition that such voluntary programs need not involve increased taxation.
9. A continuous survey of all voluntary plans for hospitalization and illness to determine their adequacy in meeting needs and maintaining continuous improvement in quality of medical service.
10. Discharge of physicians from the armed services as rapidly as is consistent with the war effort in order to facilitate redistribution and relocation of physicians in areas needing physicians.
11. Increased availability of medical education to young men and women to provide a greater number of physicians for rural areas.
12. Postponement of consideration of revolutionary changes while 60,000 medical men are in the service voluntarily and while 12,000,000 men and women are in uniform to preserve the American democratic system of government.
13. Adoption of federal legislation to provide for adjustments in draft regulation which will permit students to prepare for and continue the study of medicine.
14. Study of postwar medical personnel requirements with special reference to the needs of the veterans' hospitals, the regular army, navy and United States Public Health Service.

ORIGINAL ARTICLES

Scientific and General

SOME OBSERVATIONS ON DEFICIENCY DISEASE WITH SPECIAL REFERENCE TO THIAMIN*

JAMES F. RINEHART, M.D.

AND

LOUIS D. GREENBERG, PH.D.

San Francisco

IT should be realized that nutritional deficiency disease which is clinically manifest represents an advanced deterioration in metabolism, one that has resulted in either profound impairment of function or frank structural damage to tissues. It is evident a significant metabolic inadequacy must precede such alterations. Also, it should be recalled that most deficiency diseases recognized clinically is "acute" deficiency resulting from a nearly complete absence of an essential nutrient. What is the influence on the organism of less severe deficiency operating over long periods of time? One may ask if there are such states. Studies of deficiency disease in animals leave little doubt of this. For example, inadequate thiamin or riboflavin will retard growth without outward manifestations of deficiency and vitamin C deficiency will impair skeletal and dental development without the more obvious manifestations of scurvy. Thiamin deficiency in the rhesus monkey is reflected by diminished food intake, apathy and weight loss long before the eventual collapse. Manifestations of either the early or chronic deficiency states are usually not distinctive enough to be recognized with any degree of certainty. It is desirable, then, to establish objective methods for nutritional assay to detect suboptimal nutritional states. This is of importance in determining the extent of malnutrition in population groups, in evaluation the possible rôle of deficiency in diseases of obscure etiology, as well as in management of the individual case.

With these facts in mind we, as others, have endeavored to develop such methods of examination. Recently we reported data on the detection of subclinical vitamin C deficiency.¹ The present report is concerned with a brief review of some current studies of thiamin deficiency and with the writers presentation of a point of view with regard to nutritional deficiency. We have recently described a sensitive and accurate method for determination of thiamin in the blood, and shown, in the rat, that the concentration in the blood parallels the tissue content and the thiamin intake.² The rat adapts himself remarkably well to highly purified diet. Such a diet supplemented with the known vitamins required by this animal and with graded doses of thiamin reveal interesting data. A thiamin supplement of 40 gamma daily produces an excellent growth curve, 10 gamma a relatively poor one, and 20 gamma an intermediate curve.

Currently, a study of thiamin deficiency in the monkey is being conducted in which unanticipated degenerative

changes have been found in the central nervous system* giving clinical manifestations which are certainly not of a type that would lead one to think of thiamin deficiency. The blood thiamin in the adequately fed monkey ranges from 5 to 10 micrograms per 100 cc. In thiamin deficiency experiments, the animal's food intake and weight begin to fall off at about the same time the blood thiamin level falls below five micrograms per 100 cc. This occurs approximately two weeks after the thiamin supplement is withdrawn.

The metabolism of thiamin appears to be similar in the monkey and man. In a series of 33 normal individuals (cooperative medical students) blood thiamin concentrations have ranged from 4.8 to 12.8 micrograms per 100 cc. with only three cases below five and none below four micrograms. Observations of two students examined subsequently are of interest. One of these complained of lassitude and presented a characteristic cheilosis with crusted fissures at the angles of the mouth. The blood thiamin content was low (3.5 microgram per 100 cc.) even though the sample was not taken until ten days after moderate supplements of vitamin B complex, including thiamin, had been taken. The lesions cleared with further B complex supplements. In a second student, showing an initial blood thiamin of 4.3 microgram per 100 cc., urinary excretion studies were carried out. The fasting excretion of thiamin and the excretion following a test dose was low and remained so even after a five mg. supplement had been administered daily for six days. In this case we have rather definite evidence of depletion of tissue stores correlated with a lowered blood concentration. In collaboration with Dr. Logan Gray of San Mateo, blood thiamin determinations have been made in a series of cases in whom thiamin deficiency was suspected either on the basis of suggestive clinical manifestations or of a poor nutritional history. Many of the patients showed blood thiamin values ranging from two to four micrograms per 100 cc. These observations require extension and further analysis but it is perhaps noteworthy that a number of the patients suffered from complaints ordinarily not considered referable to thiamin deficiency. From the data at hand it would appear that estimation of blood thiamin will afford a reasonably accurate method for determining the adequacy of thiamin intake and the tissue stores available for effective metabolism.

COMMENT

There are opposing points of view with regard to deficiency disease. On the one hand are those who would, with little foundation, ascribe most human ills to nutritional deficiency. Perhaps due to an inherent conservatism and as a reaction to the commercialization of vitamins, many physicians have assumed an ultra conservative and equally unwarranted position. It is not logical to deny the existence of vitamin C deficiency until the teeth fall out or a vitamin B deficiency unless the patient exhibits a florid pellagra or beriberi.

It should be recalled that nutrition as applied to medicine is just approaching a sound scientific foundation. Our dietary habit has evolved with little benefit or planning based on knowledge. As a nation we have accustomed ourselves to prefer bread from a highly refined wheat to which, only recently, under the exigencies of war, has been restored the thiamin and riboflavin removed in the process. In the early days of artificial infant feeding the occurrence of infantile scurvy became so frequent that a committee was appointed by the pediatricians to study the problem. It is doubtful if the knowledge is yet universal that some source of vitamin C is required to supplement the diet of the bottle fed infant. Scurvy is rarely manifest before nine months but who

* Chairman's Address. Read before the Section on Pathology and Bacteriology, at the Seventy-fourth Annual Session of the California Medical Association, Los Angeles, May 6-7, 1945.

From the Divisions of Pathology and Pharmacology, University of California Medical School, San Francisco. Supported by the Christine Breon Fund for Medical Research and the A. B. Miller Fund.

† The distribution and character of these lesions is somewhat different than those in Wernicke's syndrome. A detailed study of these lesions is being made and will be reported later.

could deny impairment of health and resistance before the obvious breakdown. The nutritional requirements of pregnancy deserve much more consideration and study. Recent reports indicate that health and well-being of the newborn infant can be correlated to a considerable degree with the adequacy of the maternal diet.³ A fascinating and undoubtedly important field of study lies in the possible rôle of preclinical or chronic nutritional deficiency in the pathogenesis of illness of obscure etiology. We have reported studies which have strongly suggested a contributory influence of vitamin C deficiency in rheumatic fever and rheumatoid arthritis.^{4,5} Man has inadvertently subjected himself in many cases to uncontrolled experimentation in chronic deficiency of one or several essential nutrients. To what extent do these deficiencies play a rôle in the chronic disease states from which he suffers? One of the most active and promising phases of research in the field of neoplastic diseases is concerned with the possible influence of nutritional factors. The large and important problems of mental and degenerative disease of the nervous system should be systematically explored from the standpoint of nutrition. The field of vitamin and enzyme chemistry is very closely related to the fields of chemotherapy and antibiotics. Nutritional research has contributed greatly to the progress of medicine and we may reasonably expect greater rewards from further studies. Such studies must be scientifically sound and in so far as possible based on objective methods of observation.

SUMMARY

Observations are reported relative to the detection of thiamin deficiency by assay of the thiamin content of blood. The importance of objective methods for evaluation of nutritional states is stressed. Such methods are needed for detection of subclinical deficiency, resulting from prolonged suboptimal nutrition and for detection of the earlier phases of deficiency disease which precede the obvious clinical manifestations. Such methods may be applied to surveys of population groups, in the evaluation of the possible rôle of nutritional deficiency in diseases of obscure etiology as well as in the management of individual cases. The rewards of nutritional investigations have been great and offer even greater promise for the future.

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Murphy Button.—With his flair for the dramatic and his frequent disputations on numerous medical issues, John B. Murphy was a colorful figure in the surgical world. The more of an audience in his clinic, the more perfect his technique. Always ready to advance in new fields where conservatives feared to tread, he soon gained the name of "stormy petrel of surgery." One of his biggest battles was against the scepticism of early diagnosis and operation in acute appendicitis. Though perhaps not seen by all, most physicians are familiar with the "Murphy Button."—Warner's *Calendar of Medical History*.

LUMBOSACRAL SUBARACHNOID BLOCK*

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THERE have been a number of different approaches used to block off the lower lumbar and sacral nerves. This paper will explain a method which was first introduced about six years ago by John A. Taylor, a urologist in New York City. The word "lumbosacral" refers to that area through which the needle is passed in doing this block, and likewise the area anesthetized, which is supplied by the lower lumbar and sacral nerves.

In reviewing the literature it is believed that this was the first time this approach was used in entering the subarachnoid space. However, it is possible that this site was not chosen before because it would be impossible to enter the spinal canal directly over this space. On examination of the skeleton it will readily be seen that the space which lies between the inferior surface of the 5th lumbar and the sacrum is the largest in the whole spinal column. The spinous process of the 5th lumbar overhangs this area and thus precludes any approach directly over this point in order to gain entrance to the canal.

In those cases in which there is a deviation of the spinous process of the 5th lumbar to one side, the space on the opposite side is thus increased, and the approach is made on this side. If one has access to the x-ray film before this procedure, it would naturally facilitate finding the best site of approach, but the operator does not always have this added information. In such a case the puncture is done the same as most spinal on the assumption that the structures are normal, and usually very little difficulty is encountered.

PREPARATION OF PATIENT

The preparation of the patient before coming to surgery is an important factor, and therefore it is the anesthetist's responsibility to examine the patient the night before surgery, and determine with what type of patient he is working, and order the proper medication. The preparation of the patient starts with 1½ to 3 grains of nembutal the night preceding surgery. In the morning 1½ to 3 grains of nembutal are given two hours before surgery. Then one hour later a hypodermic of Dilaudid, grain 1/32 or grain 1/20 with 1/200 of scopolamine is given. In the morning, after the medication, a mask is put over the patient's eyes, and cotton placed in the ears. These details seem to be commonplace, but they are valuable points in the success of the anesthetic.

POSITION OF PATIENT AND PROCEDURE

When the patient is placed on the operating table, he lies on his abdomen. The arms are placed above the head. A small pillow is placed in the lumbar area. Easy access to the canal is thus obtained by placing the patient in such a way that this area is as nearly level as possible. The skin is prepared with merthiolate or other antiseptic, and sterile drapes are placed around the field. The bony landmarks are then palpated; first, the crest of the ilium is located and an imaginary line drawn through to the opposite side will pass approximately between the fourth and fifth lumbar. Next the lowest prominence of the posterior superior iliac spine is palpated. A wheal is then raised about 1 cm. below and 1 cm. medially to this bony landmark. This site is about the location where entrance is gained to enter the 2nd sacral foramen.

At this point a few cc. of novocain are deposited both

* Chairman's Address. Read before the Section on Anaesthesiology, at the Seventy-fourth Annual Session of the California Medical Association, Los Angeles, May 6-7, 1945.

in the skin and deeper tissues. The spinal needle used is about 4½ to 5 inches in length, and 22 gauge. With the index finger resting on the spinous process of the fifth lumbar vertebra, the needle is passed through the wheal upward and medially, continuously pointing to the direction of the spine of the fifth lumbar. The upward angle is about 55 degrees, approximately the angle that the dorsal surface of the sacrum makes with the overlying skin at this point. The medial angle varies with the width of the sacrum, but the needle is so directed that it will be in the midline at the lumbosacral space. Care should be taken when directing the needle that it does not come in contact with the periosteum with much force as this may be a cause of much discomfort to the patient. In passing through the deeper structures the needle follows the course of the sacrum to the lumbosacral space. If the needle comes in contact with the bony structures its direction is changed slightly and advanced slowly and carefully. The sensations felt by the operator as the needle advances are about the same as one experiences in a higher puncture, and the characteristic feel is noted as the dura is penetrated.

In most cases as soon as the space is reached the spinal fluid appears, but not as forcefully as in the higher puncture in the side position. In some cases it is necessary to withdraw the spinal fluid. About 1 to 3 cc. of fluid are withdrawn, and to this 150 mg. of novocain and 5 mg. of pontocain are added, depending on the particular case and work to be done. This solution is slowly reinjected into the spinal canal. The response to the novocain is immediate. If a rectal operation is to be done, the patient is usually left in the same position; however any position can be used without harm to the patient if the rules of gravitation are applied the same as with the higher spinal. The blood pressure is recorded at short intervals and the patient should now be resting quietly. The Trendelenberg position can be used, the degree of which depends on the type of operation and other factors.

COMMENT

The advantages of this type of block are many. For most patients, lying in the prone position is much more comfortable than on the side in a flexed cramped position. However in some cases, when the patient cannot lie on the abdomen, the lumbosacral approach can be done with the patient on his side, but it is not necessary to flex the body to any great degree. This factor alone is of great advantage in obstetrical cases where a low block is desired for delivery.

This approach is of great value in those cases that are not able to bend their spine due to some pathological condition, such as arthritic changes or tuberculosis of the spine, or possibly a congenital bony defect.

This approach may be about the only method of procuring spinal fluid in meningitis and the accompanying opisthotonus. There is less fall in blood pressure and therefore less shock for the patient with this method. It is also a great advantage to the operator doing a prostatic resection not to have a great drop in the patient's blood pressure as all bleeding points can be stopped at the time of operation with no likelihood of hemorrhage from a rise in blood pressure after the patient has returned to his room. It is thus a safer anesthetic for the old and for those who are poor risks. Furthermore it is such an easy method that it can be used in the office without an assistant to hold the patient.

A review of one hundred of my cases done in a private hospital reveals the interesting fact that the average drop in blood pressure was only 10.8 systolic, and 6.5 diastolic. In fifteen cases there was no change in blood pressure. In a few cases one-half ampoule of ephedrine was used before injection. The average age of the patients was 67;

the youngest being 16, and the oldest 86 years. Only two patients had headaches which occurred shortly after surgery, but these could not be directly attributed to the anesthetic.

The cases in which this block was used were mostly urological; 48 cases were prostatectomies, transurethral, perineal, and suprapubic. There were cases of bladder fulguration, vasectomies, cystotomies. There were 19 hemorrhoidectomies and other rectal operations. The balance of the group included cervical biopsies, cauterizations, and various vaginal repairs. There were no complications of any notable degree recorded.

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PUBLIC HEALTH BACTERIOLOGY*

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BACTERIOLOGY and its allies (serology, immunology, mycology, parasitology, and virology) cease to become separate entities and merge under the larger field—Medicine.

It would be easy to indulge in histrionics to which the laboratory is so well adapted and which have so often been used. The creed of medicine has no place for histrionics and fantasy. We could presume, with pure speculation, that there must be a prize greater than the sulfa drugs and penicillin, just around the corner. There have been discoveries; there will be more.

PHYSICIANS IN RELATION TO PUBLIC HEALTH LABORATORIES

There are three general ways in which the relationship between physicians and the public health laboratories of tomorrow will be strengthened.

First—from these laboratories will come information which will give us a stronger hold on our knowledge of the etiology of infections. The background for much of our knowledge of diagnosis, treatment, and epidemiology hinges on an understanding of the etiology. This will help in many diseases, the etiology of which is not known or not understood. Differential diagnosis is increasingly difficult and dependent upon the laboratory. We are encouraged by glimpses of possible order to come in the confusing groups of diseases caused by viruses, rickettsiae, and yeasts and moulds. In the practice of a physician and in the epidemiologic control of infection, knowledge of the etiology has been a significant key in development. We may lose our grip on bacteriologic technicalities but we cannot afford to lose it on etiology and on diagnosis.

Second—we are sure to have significant technical improvements in the laboratories. We are likely to overlook the influence of these technical improvements on medical practice and public health. For example, there are thousands of culture media, and the adding of one or two more seems inconsequential. Wilson and Blair devised a medium which permits typhoid bacilli to grow as black colonies while almost everything else is inhibited. Leifson devised a desoxycholate medium and the Difco Laboratories prepared a *Salmonella-Shigella* medium known as SS medium. While these developments occurred some dozens of other culture media were added to the thousands that exist, yet the addition of these three has improved the quality of laboratory work in con-

* Chairman's Address. Read before the Section on Public Health, at the Seventy-fourth Annual Session of the California Medical Association, Los Angeles, May 6-7, 1945.

From the office of the Director of Public Health, City and County of San Francisco.

nnection with enteric infection so much that epidemiologic data are changing.

The third of these general shifts is a change in attitude. The increasing complexity of our existence is forcing specialization, whether or not we approve. The day has gone when the physician was also an expert technician. He must turn over the burden of technical knowledge of the laboratory to the technicians and end the pretense of expert knowledge. He will have all that he can manage to learn how to secure specimens, when to get them, what to do with them, and how to interpret the reports sent to him from the laboratory. He will do well to give to the laboratory the information that it needs to examine specimens intelligently. He must learn to accept the decisions of the laboratory predicated upon its knowledge of the technique with which it deals.

The relationships between the physician, the epidemiologist, and the laboratory will improve with better coördination of effort. It takes the physician as long to handle specimens and reports from a poor laboratory as from a good one; it takes the laboratory as long to handle a useless specimen as a legitimate one. This wasteful gap needs reduction. We need to guard against the satisfaction that comes from taking a specimen, when that specimen is meaningless.

TENDENCIES IN OVER-CLASSIFICATION

One becomes dizzy at times with the present tendencies of bacteriologists to emulate the atom-cracking physicists. They are no longer content with a species of bacteria. They must needs divide them in groups, subdivide them into types, analyze these for genetic variants, check them for phase specificity, and then apply letters of half the alphabet to stages of their life cycles, somatic structure, flagellar components, virulence, and specific carbohydrate substance. If all this fails, there is the possibility of typing with bacteriophage. There are more than forty types of pneumococci; types of the medical students' anchor block, the typhoid bacillus, have passed the middle of the alphabet; and the varieties of *Salmonella* have reached astronomical figures. There are three kinds of diphtheria bacilli, if you look to your right; there are eight kinds, if you look the other way.

This chaotic condition is no more than a disorganized expression of the variation you see in your patients and designated as biologic flexibility. There have been no basic alterations in the principles of serologic reactions. The chemical, or antigenic, composition of organisms must vary almost from cell to cell. The only thing astonishing is the chaos of the descriptions. We can leave to the bacteriologists the argument about whether antigenicity should be used as a basis for defining varieties. Eventually bacteriologists will revert and reduce the number of kinds and everyone will be happier. The useful portion will then be more conspicuous. What is the useful portion?

Among the varieties of bacteria causing dysentery there have been only a few recognized types. Many physicians talk of Shiga, Hiss-Russell Y, Flexner, and Kruse. For sixteen years there has been talk of another type, isolated forty years ago by Duval—the Duval-Sonne type. This organism was overlooked for more than twenty years. It was present, it had been described, and only a short search was needed to identify it. For more than twenty years doctors sent specimens to the laboratory with inquiries about bacillary dysentery, often unrecognizable on clinical grounds alone, and received reports: "No dysentery bacilli found." Boyd, in England, has examined species from thousands of cases and has devised a cautious system of six definite groups, six more that he would like to study more before he defines them, and a couple of stubborn ones that will not fit in. Need

this throw our minds back in chaos? It need not. The chaos belongs to the bacteriologist. We do not care at all whether patients have Type II or Type VI paratyphoid organisms, but we do care whether specimens we send in are positive or negative.

The epidemiologist is vitally interested in the confirmation of diagnoses. He has also another goal in which the private practitioner too often is not interested. He must trace the connections between cases. The many types of Boyd's dysentery bacilli and the endless types of pneumococci are short and simple compared to the *Salmonella*. We repeat that we are fortunately privileged to forget such thrills as the fact that paratyphoid C bacilli are listed as Roman VI, VII, indicating their somatic components; "c" indicating a specific phase flagellar component; and 1, 4 and 5 to indicate three group type flagellar components. We are interested in knowing that the organism is a *Salmonella* and not some organism resembling something else. Furthermore, the epidemiologist has a tool whereby he can trace a particular type of *Salmonella* to places circumstantially related in an epidemic. The chain which connects separate cases is tightened. A carrier is found in an area where cases of enteric infection have occurred. When the organism is a different type from the ones found in the surrounding cases the analysis of the epidemic changes entirely. This principle has been used in food poisoning and was used not long ago in California in connection with cases of typhoid fever from inadequately ripened cheese. It is the same as Sherlock Holmes' search for special kinds of tobacco. A knowledge of special blends led to the discovery of the murderer.

VIRUS INFECTIONS

Besides antigenic typing, serologic methods are being extended to diseases for which they were not used, notably in virus infections. How can anyone predict the Davidsohn test for infectious mononucleosis, the rH tests, or, for that matter, the Wassermann itself? Something is coming out of the bacteriologic escapades in serology. What about the laboratory and general sanitation? We have been confronted with technicians who dropped silk threads in disinfectants, made counts on milk, and looked for coli in water for so long a time that we may think these are settled issues. There is a legal difference between milk counting 10,000 and milk counting 15,000, but the accuracy implied is fictitious. Our concern is for safe milk, not quibbling over procedures which do not distinguish safe milk from unsafe milk.

SANITARY PROBLEMS

The advent of air-conditioning, the increase in use of ultraviolet light, and increased emphasis on respiratory infection may lead us to consider air in the same category with water and milk. We should then want the supportive aid of the laboratory. Couple together the Wells air centrifuge, selective culture media, several of which have already been suggested, and a respiratory organism like the alpha streptococcus or *Neisseria catarrhalis*, as numerous proportionally and nearly as frequent in the nose and throat as coli in the intestinal tract, and we have a procedure which health departments may one day find useful. Restaurants and beer parlors must raise the level of their sanitation. The public demands it. Sanitary inspectors face legal situations in making inspections and can use support from the laboratory as soon as this can be made available. A simple swab technique leads the way at present, but a few experiences in the courtroom of law and with lawyers will show you the complexities of relating science, pseudo-science, and human relationships. Not all of the difficulties are bacteriologic, yet a procedure which was sound scientifically and legally would be welcome.

Sanitation of foods is a part of this problem. We have mentioned *Salmonella*. There is likely to develop a series of procedures which will detect enterotoxigenic staphylococci. This would be helpful in tracing the sources of these staphylococci, now a source of conjecture.

IMMUNOLOGY

Immunology has for years been clouded and obscured by confusing its relationship with serology. Serology is concerned with reactions between antigens and antibodies. Immunology is concerned with resistance to infection, true immunity. The assumption that antibodies are the only means of preventing infection is gradually giving way. Antibodies sometimes are part of immunity but more often they are not. As explanations, they have failed more often than they have succeeded.

In the past few years, and just before the sulfa drugs and penicillin were so widely appreciated, there was increasing frankness in dealing with immunology. Men working with viruses discovered that most of them induced the formation of protective antibodies, detectable by their ability to neutralize the infectiousness of a suspension of virus experimentally.

The presence of these protective antibodies has often not correlated with the resistance to natural infection. This has led to the simple idea that an antibody results from an antigenic stimulus without necessarily any regard to immunity. The idea that antibodies must have a defensive function is anthropocentric, a teleologic concept. The idea of antigenic stimuli is old. Harmless bacteria and harmless substances induce the formation of antibodies as well as harmful ones. Typhoid vaccine is now thirty years old and with it our criterion for success has always been resistance to infection, true immunity, and not the presence of antibodies. Vaccination against smallpox is not presumed to depend on mere antigenic stimulus.

Biologic products are predicated upon the old concept of immunology, with one saving point only. The products are designed serologically but they must work effectively for the clinician; that is, immunologically. That is why there are so few widely accepted biologic products. A complete series of products could be made for every infection if only antigens and antibodies were considered.

The addition of sulfa drugs and penicillin to our armamentarium has diverted us from the old tenets of immunology that have hung on so tenaciously. The clinical success of these drugs, and perhaps tyrothricin or some yet to be discovered, is part of our immunologic future. They strengthen the case against traditional immunology and pave the way for a franker and less pompous attitude.

Finally, it should be evident from this short essay in the field of public health bacteriology how the practice of medicine has dominated its development. It is only by proceeding hand in hand with the medical profession that the public health official can win prestige and success. Health protection is a job of the health department and any scheme for sick care may react as an intrusion in a field in which our technical training may be inadequate. This may prove even hazardous to reputations when not working in the field of special competence and assuming the responsibility of others better equipped. It brings to mind the comment of W. Trotter in his Collected Papers, London, 1941, in which the curious but potential statement is made: "The lowly and junior profession of medicine, unlike its proud and elder sisters, has no direct influence in the work of government." The further statement is made: "The result is that, at a time when it is no longer possible to conceal the wholly unique importance of medicine for the very existence of social

life, our profession finds itself of all professions the least in command of social prestige, the least privileged, the most exposed, and the hardest worked."

CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH— 75TH ANNIVERSARY

This year we celebrate the 75th anniversary of the California State Board of Public Health. It may be of interest to all of you to know that the State of California had the honor of being the second Commonwealth in the Union to establish a State Board of Public Health.

It may be admitted that in our own brief lives we have become aware of the basic medical discoveries that have been made for increasing the life span and the happiness of mankind.

101 Grove Street

FREE ENTERPRISE AND THE DOCTOR*

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SICKNESS insurance touches the lives of people so intimately and in theory is so tempting that it is always one of the first baits offered by planners for a socialized state. Bismarck introduced it into Germany in 1883; Lloyd George into England in 1912. In each case it was part of the rise of bureaucracy and the decline of representative government. It is one of the means by which men greedy for power gain control over the people and destroy their freedom. It is often said that liberty without subsistence is worthless. Franklin said that those who would trade freedom for subsistence are worthy of neither.

Americans hold liberty a priceless possession. When threatened by a foreign invader we spend life and treasure unhesitatingly. More slowly do we recognize the poison of foreign propaganda. Much contempt has been poured on the American system of economy. Never in history has any nation come so close to the four freedoms as ours, under the system of free enterprise. It is not by accident in our land that so many have so much. Freedom is a kindly soil for pioneering and for creative genius. Incentive causes men to take risks and to work more productively and enthusiastically than any slave.

ADVANTAGES OF FREE COMPETITION

True, abuses need to be corrected, monopolies curbed, wealth distributed. But we have the procedure within our constitution, and its two-party system to correct abuses. We have labor unions to bargain for their rights. We are not slaves. How then do we listen to the siren song of the socialized state which, Hayek has shown, leads directly to totalitarianism. We realize that some of our people do not have adequate food or housing or medical care. Does that prove that bureaucracy would be better? Russia before the revolution was not a starving nation. But after twenty-five years of totalitarian management, during which many millions starved, the general standard of living, despite lavish natural resources, is less for nine-tenths of its people than for our lowest tenth on relief during the depression. To curb the source of our wealth by bureaucratic control will leave less to distribute. The ultimate result will be not to make everyone rich but to make everyone poor. Capitalism is incompatible with totalitarianism because it connotes freedom. Freedom to purchase at the most favorable rate means competition. Competition by causing the failure

* Chairman's Address. Given before the Section on Urology, at the Seventy-fourth Annual Session of the California Medical Association, Los Angeles, May 6-7, 1945.

of inefficiency saves waste. Our railroads in the first war were under government management to avoid competition. They cost the government a great deal of money and the service was poor. In this war a vastly better job has been done; the railroads have rehabilitated themselves and paid the government millions in taxes. Every dealer in a commodity, whether merchandise or medical care, is stimulated by free competition. With bureaucracy less of the doctor's time will be available for service. The province of government is to hold monopoly in check and promote fair competition.

ON PROPAGANDA

We should be wiser and more alert to the deceit of clever propaganda. We should realize that the party line of all totalitarian states not only tolerates but demands of its agents an utter disregard for truth. They aim at world domination. The end justifies the means. They confuse the meaning of words. We call ourselves a democracy—that is, rule of the common man. All the totalitarian states are essentially the same—rule by the few. Yet Russia calls itself democratic. The first line of totalitarian propaganda against real democracies is to talk down a representative government and ridicule the legislators. In 1929, Lord Hewart, Lord Chief Justice of England, published his book, "The New Despotism," where he describes in detail the process by which power was being transferred from Parliament to bureaucracy and placed beyond the jurisdiction of the law courts. The process Lord Hewart described has made an appalling progress since he wrote. Parliament is now openly derided as an ineffective "talking-shop" whose sole remaining function is to transfer the remainder of its sovereignty to the experts "so obligingly infiltrated into the Civil Service from the London School of Economics training ground." (See the *Weekly Review*, July 20, 1944).

The final step is to win some intelligentsia by the promise of leadership and liquidate the rest. Freedom of religion goes. The unthinking masses are taken over by glowing cradle-to-the-grave promises or intimidation by secret police. Foreign exchange, travel and news is controlled. Youth segregated, indoctrinated and welded by hate grows into a fanatical army. We have seen this develop in many countries. With the tragic vision before our eyes of the downfall of a great, once liberal nation which followed socialism to its bitter end, we should be well warned.

WHY PHYSICIANS OPPOSE STATE CONTROLLED MEDICINE

Why does the doctor the world over oppose state controlled medicine? It is easy for many persons to jump to the conclusion that the physician opposes because it may curtail his income. However, the average income may be just as high with state medicine as without. The doctor opposes it because political control and restrictions so hedge him about that he cannot practice the scientific medicine which he has been taught. The system is frozen by regulations; therefore he deteriorates instead of growing better. From the patient's point of view, the greatest objection is the third party, the state, coming between him and his doctor. This is a bitter complaint in England. The doctor is divided between his duty to his employer, the state, and to his patient, who never knows whether he is getting disinterested advice. State medicine is practically always a part of a comprehensive socialized system by which the doctor has two functions: (1) Medical care and treatment; (2) Certification for cash disability payments. This situation greatly aggravates the doctor's troubles. It takes his time and

he pleases neither his state administrator nor his patient. The German notes in the *Journal of the American Medical Association* before the war stated that cash benefit certification occupied half of the doctor's time.

PANEL SYSTEM OF ENGLAND

England has the panel system. A doctor may have up to 2,500 patients, more likely 1,500, for whom he gets \$2.25 per person per year. Dependents are not covered but the same doctor generally cares for them at a low fee. The doctor keeps an office hour from 9:00 to 10:00 in the morning and from 6:00 to 7:30 in the evening. There will be 20 to 60 people in during each time for medical service or certification for cash benefits. He must see them all. He must take out the record in each case, make his diagnosis, sign a certificate or a prescription and make his clinical notes on the card. Thirty persons in an hour and a half allows three minutes per person. The record is a card 7 inches by 5, ruled in lines. An inch is devoted to date, $\frac{3}{4}$ inch indicates office or house visit or cash certification. Two and a quarter inches are allowed for clinical notes and the final inch for diagnosis. No space is allowed for treatment, so that for diagnosis is used. There is an average of one prescription per person each time he calls on the physician.

The regulations provide that "The clinical purpose of the record is to contribute to the efficient treatment of insured persons by preserving in permanent and readily accessible form records of such clinical data as are likely to be of assistance to the practitioner or other practitioner under whose care the patient may subsequently come." You may judge how nearly the system comes to its aims. If the doctor's panel is 1,000 or more he may have from 20 to 50 house calls. It was stated in the *Journal of the American Medical Association* the year after state medicine was inaugurated in England the consumption of narcotics was doubled. This is a panel practice. If the patient is too ill to be cared for at home the panel doctor refers him to a hospital and is not then responsible. He does not follow the patient in the hospital, nor does he generally get a report from the hospital when the patient is discharged.

OTHER EUROPEAN PLANS

The general practitioner becomes harassed and inefficient. I was told in Germany in 1930 that only 3 percent of the physicians in Germany were in private practice. The reward is so little that the ablest students do not elect medicine. In Russia they had to be conscripted. It is unnecessary to say that poor medicine is expensive medicine. Workmen's compensation administrators have found this out.

The income bracket under \$1,500, which comprises most of the workers of western Europe, is covered by sickness insurance, both for medical care and cash disability indemnities. When once the plan has been inaugurated, however unsatisfactory, it cannot be abandoned because of the contractual obligations to those who have paid premiums. The funds have seldom allowed for medical progress, so that there is always an insufficiency for modern medical care. Some funds have not yet allowed x-ray, insulin, liver therapy. Most of the income group covered would be eligible to a better standard of medical care free in this country. In fact, the standard is so far below American expectations that the fund would have to be much larger to cover acceptable care here.

In 1938 J. G. Crownhart made a six months' study of sickness insurance in Europe. He was sponsored by many

notable, socially minded people, including U. S. Senator Robert M. La Follette, Dr. Frank G. Boudreau, Medical Director of the Milbank Fund, and recently Director of the Health Section of the League of Nations, Isador I. Falk, Chief of Division of Health Studies, United States Social Security Board, and others. I am indebted to this study for information used in this paper and quote his summary:

"The theory of sickness insurance and the practice are entirely different.

"There can be no certainty that the premium is adequate or will remain so, as the demand for service is not susceptible to actuarial computation.

"The primary responsibility of the physician is to the government and not to his patient.

"Premiums once established are rarely changed.

"State systems provide opportunity for political control.

"The rôle of sickness insurance in Europe is salvage.

"The system loads the physician beyond his capacity to render a sound quality of sickness care.

"Free choice always has limitations.

"While the theory of sickness insurance indicates its use as a powerful weapon in disease prevention, there is no indication that it has ever occupied that rôle.

"The constant effort in sickness insurance is to devise ways and means of delivering the benefits that the theory envisions but the practice inhibits."

IN CONCLUSION

It is the duty of the physician as a citizen to make known to the public the fact that medicine heretofore rendered in Europe under comprehensive health insurance is greatly inferior to what American citizens have been taught to expect, even in free clinics. The public should also know that politicians in foreign countries have used this as one of the early baits for a progressively socialistic state which has, in more than one case, ended in totalitarianism and disaster.

65 North Madison Avenue.

MEDICAL EPONYM

Gilbert's Disease

This was first described by Professor A. Gilbert (1858-1927) at a meeting of the Société médical des hôpitaux de Paris on July 27, 1900, in a paper entitled "De l'ictère familial: contribution à l'étude de la diathèse biliaire [Familial Jaundice: A contribution to the study of the biliary diathesis]," in collaboration with Drs. J. Castaigne and P. Lereboullet, in which a number of cases of jaundice of diverse origin are described. Their paper appeared in *Bulletins et mémoires de la Société médicale des hôpitaux de Paris* (17:948-959, 1900). A portion of the translation follows:

Whatever else the nature of this hereditary predisposition to infection of the biliary passages may be, it seems to us to be proved by the facts that we have reported. Not only lithogenic angiocholecystitis, then, is hereditary; simple or cirrhotic angiocholitis may equally be so, and by reason of this predisposition, one may meet in a single family with the various clinical types, the principal characteristics of which we have described.

In subsequent papers he further describes simple, non-hemolytic familial jaundice—for example, in an article entitled "La cholémie simple familiale [Simple Familial Cholemia]," in the *Gazette hebdomadaire de médecine et de chirurgie* (7:889-897, 1902), he states: "Familial cholemia is extremely common. . . . It is a familial, hereditary disease."—R. W. B., in *New England Journal of Medicine*.

THE ROLE OF THE GALLBLADDER IN DISEASE OF THE LIVER*

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THE rôle of the gallbladder in production of disease of the liver is a matter of some controversy and disagreement. Nevertheless, this relationship does exist in some cases. Its occurrence, however, is infrequent and confined to certain complications of cholecystitis and the presence of neoplasms of this organ.

STUDIES OF GRAHAM, JUDD AND OTHERS

Our attention to this problem was first drawn by the work of Graham,^{1,2} who from his pathological and experimental studies seemed to prove that inflammatory changes in the liver constantly occurred in association with cholecystitis. He believed that cholecystitis originated from infections in the liver which reached the gallbladder either by a hematogenous route or by the way of the lymphatics going from the liver to the gallbladder wall and later to its mucosa. The type of pathological reaction described as hepatitis by Graham which was supposed to be the origin of the infection causing the cholecystitis, was an infiltration surrounding the portal vein and its branches in the stroma of the liver, consisting of an increase in the production of the fibrous tissue of the stroma together with a cellular exudate characterized by mostly lymphocytes and plasma cells and a scattering of polymorphonuclear leucocytes. This picture came to be known as periportal infiltration or periportal hepatitis and later on interstitial hepatitis. The later observations of Judd, Nickel and Wellbrook³ and later by Judd⁴ in another paper, also emphasized the origin of cholecystitis by the lymphatic spread from the liver. Here there appeared to be evidence that the liver was probably the primary seat of infection which gave origin to cholecystitis rather than that cholecystitis gave origin to disease of the liver.

While the conclusion of Graham, Judd and others were accepted by many, they were open to question because it appeared from the work of Rous and McMaster⁵ and Harrar, Hargis and VanMeter⁶ that lymphatic spread does not occur from the liver to the gallbladder as Graham and Judd stated, but rather from the gallbladder to the liver. Furthermore, other experimental studies showed that infection of the gallbladder occurred by the way of the cystic duct by means of infected bile. Wilkie⁷ found that cholecystitis did not occur if the cystic duct was ligated, and furthermore, that after the production of acute cholecystitis by this method no hepatitis resulted if the gallbladder had been freed from its attachment to the liver, indicating that infections might spread from the gallbladder by way of the lymphatics to the liver.

OTHER STUDIES

On the basis of these experimental findings and from their own study of 27 cases of cholecystitis, Koster, Goldzier and Cullen⁸ in 1930 turned squarely about from the position of Graham, Judd and others and stated that they believed that liver changes when they occurred were secondary to cholecystitis and inferred that the gallbladder originally may have been infected by bile containing organisms excreted by the liver. This relationship Koster and his associates believed could be reconciled to the clinical observation that patients with long-

* Read before a joint meeting of the Sections on Medicine and Surgery at the Seventy-fourth Annual Session of the California Medical Association, Los Angeles, May 6-7, 1945. One of four papers in a panel discussion on Diseases of the Liver.

standing gallbladder disease because of the remaining hepatitis are less frequently and completely relieved of their symptoms by cholecystectomy than those in whom the disease has been of shorter duration. This conception they believed constituted a plea as well for the earlier surgical treatment of gallbladder disease in order to prevent further spread of the infection with the production of disease of the liver.

COMMENT

While there are valid objections to the theory of Graham, there are also valid objections to the opposite view held by Koster and his colleagues, for were the view of the latter investigators true, then those people afflicted with cholecystitis with gallstones for a number of years would certainly be expected to have a complicating hepatitis which in turn might be expected to give them trouble after the removal of their gallbladder but, as pointed out by Martin,⁹ this is usually not the case unless there has been some involvement of the common duct.

A further criticism of the deductions from their studies is that after all this periportal infiltration is not necessarily specific for cholecystitis but as Kahlstorf,¹⁰ Kettler,¹¹ and Noble¹² showed in their necropsy studies it may occur not only in disease of the biliary tract but in chronic or acute disease of the gastro-intestinal tract and in 92 per cent of general infections, and is of no probable clinical significance.

Finally a paper by Colp, Doubilet and Gerber¹³ in 1935 reviewed this whole subject, and like Koster and his colleagues, these investigators took tissues from the liver at some distance from the gallbladder or biliary tract since it was recognized that liver tissues immediately adjacent to the gallbladder might show evidence of localized inflammation, probably from direct extension from the gallbladder. These tissues were later sectioned and studied very carefully by special cytologic stains. From their studies they concluded that "Periportal infiltrations observed in biliary tract disease are not specific for the disease but represent a reaction of the liver to extra-hepatic infection. Hepatitis is not an accompaniment of cholecystitis, as evidenced by the absence of inflammatory and parenchymal changes in the liver."

In summary of these various viewpoints, it may be stated that we have passed through three stages of thought, the first expounded by Graham, that cholecystitis was considered secondary to primary liver disease, to a second stage and opposite view by Koster and his associates that cholecystitis was the primary disease and hepatitis the secondary involvement, to the third stage in which the pathologic changes described both by Graham and Koster are believed by Martin, Noble, Kettler, Kahlstorf, and by Colp and his associates, to have no relation whatsoever in the production of either cholecystitis or hepatitis and that these pathologic changes are not specific for any particular infection and are of no clinical significance.

All of this would seem to be very well except that there are still to be considered certain complications of cholecystitis as well as the presence of neoplasms of the gallbladder, representing primary disease of the gallbladder, which do produce secondary disease of the liver. The relation of gallbladder disease, therefore, to production of disease of the liver concerns us with a consideration of the complications of cholecystitis and later of primary neoplastic disease of the gallbladder.

COMPLICATIONS OF CHRONIC AND ACUTE CHOLECYSTITIS

Perforation of the gallbladder occurs much more frequently in acute cholecystitis or subacute cholecystitis than it appears as a complication of chronic cholecystitis.

It may occur in acute infectious cholecystitis without stones but much more often in gallbladders containing gallstones. In about eighty-five per cent of the cases gallstones may be present either in the bladder itself, or especially in the cystic duct and in about 20 per cent of the cases in the common duct.

Since gallstones are present therefore in most of these cases, there is usually a preceding history of symptoms suggesting chronic cholecystitis or biliary colic from the passage of other gallstones. When the acute attack, however, sets in, it may develop with marked rapidity. The symptoms are chiefly those of upper abdominal pain with some rigidity, nausea and vomiting. The pain may be mild or dull but it is sometimes severe and for the most part situated in the right upper quadrant with some radiation around to the back under the right shoulder blade. There is a feeling of bloating due to a sensation of fullness in the epigastrum and while attempts are made to relieve this by vomiting, it is usually without avail. These patients run an elevation of temperature which varies anywhere from 100° to as high as 105° Fahrenheit in those having gangrene and perforation of the gallbladder. There may be a suggestion of icterus from the appearance of the sclerae but in most cases there is no jaundice unless there is an associated cholangitis.

Physical examination discloses an uncomfortable patient who may be nauseated and vomiting. On examination of the abdomen by palpation there is extreme sensitivity and tenderness over the gallbladder area and a definite sense of rigidity of the abdominal muscles. Deep pressure produces more severe pain and sometimes a distended gallbladder may be palpable although usually not because of the rigidity of the abdominal muscles.

The laboratory findings are of definite value in that they show a marked leucocytosis which may range from 18 to 30,000 in cases where a suspected gangrene or perforation has occurred. The icterus index may at first be normal but if there is any extension involving the liver, either as cholangitis or later by abscess formation, the icterus index may be slightly elevated, even to the point of clinical jaundice.

Perforation of the gallbladder may be suspected in those cases of acute cholecystitis which do not respond to conservative treatment but in which the white count increases and the temperature continues to remain high along with increasing pain and rigidity in the right upper quadrant.

Following perforation there is the production of a localized peritonitis with abscess formation which may be located in the region of the fundus of the gallbladder or in the region of the cystic or common duct. Generally this abscess may be walled off by the omentum and only rarely does it result in a generalized peritonitis. The abscess cavity may contain one or more gallstones should gallstones be present. Further progress of this complication of acute cholecystitis is in the extension of the abscess to involve the liver substance itself. While this occurs very rarely, it is something to be on the watch for and may be suspected when the patient begins to have daily chills in addition to the high fever he is running. With extension into the liver a single abscess may result or multiple abscesses, from the presence of cholangitis, in which case the patient may be jaundiced.

As to the frequency of perforation, Zollinger¹⁴ in 1941 reported that perforation occurred in 16 or 13 per cent of 121 cases of acute cholecystitis. In another series of 84 cases of acute cholecystitis reported in 1942 by Glenn and Moore,¹⁵ 22 of them or 26 per cent had perforation of a gangrenous gallbladder, with abscess formation.

TREATMENT

It is advisable that cases of acute cholecystitis be hospitalized at once so that their progress may be closely

watched in the next few days when the issue of operation must be faced. Many cases of acute cholecystitis will begin to subside after two or three days of treatment in the hospital while others are more stubborn and the condition may become progressively worse as these cases go on to perforation. The patient should be confined to bed with hot applications to the right upper quadrant. Glucose solutions are given intravenously up to 2000 cc. daily. The diet is generally a bland diet high in carbohydrate and protein, and low in fats. Any distention of the abdomen may be relieved by enemas, intermittent Harris flush or sometimes by saline laxatives. The pain may be controlled by either morphine with atropine or demerol hypodermically. The patient is watched carefully and frequent or daily blood counts are made to watch the direction of the leucocytosis. Likewise the icterus index may be taken to detect the development of jaundice which may later become clinical and signify involvement of the liver by cholangitis.

I believe it is advisable in all cases of acute cholecystitis treated in hospitals that penicillin be administered at once. It is well to start with 20,000 units every three hours while the temperature is high and as improvement occurs the dosage may be reduced to 10,000 units every four hours. Penicillin may be a life-saving measure in exceedingly obese patients especially if they are late in coming to the hospital after the onset of their illness, for this fact with their obesity increases the surgical risk.

If, as a result of hospital medical treatment with penicillin, intravenous fluids, hot compresses, etc., the patient makes a good recovery, surgery then may be postponed, but a much better plan is to wait seldom longer than two to four days when one finds that the patient is not making satisfactory progress, as indicated by a high temperature, increasing leucocytosis, pain, and rigidity. In such cases the gallbladder may have perforated with the production of a local abscess. When cases are operated cholecystectomy and drainage with search of the cystic and common ducts is the operation of choice, but if the gallbladder is too gangrenous and friable and the patient obese and very sick then cholecystostomy and drainage should be the only surgery performed. While the opening of the common duct in search for stones is associated with a higher mortality, Zollinger believes that the mortality is not as high as that which would follow with a second operation for the removal of these stones.

In those cases in which the abscess formed by perforation of the gallbladder extends into the liver to form a solitary abscess there, cholecystectomy or cholecystostomy with further drainage of the abscess cavity is usually sufficient, but when multiple abscesses occur adequate drainage is usually impossible and in these cases the adjunct treatment with penicillin may be of life-saving service to the surgeon and patient.

The appearance of perforation therefore in acute cholecystic disease is one of the complications of cholecystitis which may lead to the production of liver disease either by the formation of local or multiple abscesses.

CHOLANGITIS

The second complication of acute cholecystitis which leads to disease of the liver is cholangitis. While this disease of the biliary ducts may be a primary disease of the liver caused by an infection which may be either blood-borne or ascending from the duodenum or descending with the bile from the liver, it may develop as an extension from an acute inflammation of the gallbladder or following obstruction of the common duct due to stones.

In a series of acute non-calculus cholecystitis reported by Wolfson and Rothenberg,¹⁸ eight or 25.8 per cent of the cases had cholangitis as a complicating feature of

acute cholecystitis. In another series of cases reported earlier by Blalock,¹⁷ 38 per cent of the non-calculus cases of acute cholecystitis were complicated by cholangitis and 44 per cent in the calculus cases of acute cholecystitis, thus indicating that this complication may be equally frequent in cases of acute cholecystitis either with or without stones.

The inflammation of the bile ducts in cholangitis may be mild and persistent, representing mostly hyperemia and edema of the bile duct mucosa without any evidence of pus. However, in other acute cases of cholangitis the inflammation may go on to suppuration with the presence of free pus in the bile ducts leading to multiple abscesses of the liver. These multiple abscesses are generally bile stained in contradistinction to multiple abscesses formed in the liver in cases of pylephlebitis. The inflammation of the bile ducts results in many of the bile passages being occluded, producing stagnating bile in the liver leading to enlargement of that organ and the production of an obstructive type of jaundice. The most common organisms isolated in these cases of cholangitis are the *bacillus coli*, *streptococci*, *staphylococci*, and *bacillus typhosus*.

In addition to the symptoms which indicate the presence of an acute cholecystitis, such as pain, tenderness and rigidity in the right upper quadrant, temperature of 101° to 105°F., sustained or increasing high leucocytosis, the appearance of jaundice is the new sign that indicates the presence of acute cholangitis. Chills may also occur in addition to the presence of jaundice and fever.

The jaundice is mostly obstructive in character, but the associated hepatitis which occurs with the infection of the bile duct often permits some bile pigment to enter the blood stream directly, in which case a biphasic Van den Bergh reaction may occur and both bile and urobilinogen are present in the urine. The amount of jaundice will fluctuate from day to day as indicated by varying degrees of brown color of the urine and the amount of brown pigment coloring the stools.

It is sometimes very difficult when seeing these cases for the first time when they are already jaundiced, to know whether or not we are dealing with a hepatitis of the simple catarrhal or epidemic form, or whether we are dealing with jaundice due to the occlusion of the common duct by stone, or, by extension of an infective process from acute cholecystitis. In these cases the medical history may afford some suggestion of previous symptoms which indicate cholecystitis, such as painful colic, recurrent bouts of fever and previous attacks of jaundice. In such cases one might reasonably be sure then that the acute cholangitis is superimposed upon an old chronic or an acute cholecystitis with or without a common duct stone. When the history does not clearly give evidence of previous cholecytic disease, the case may have to be observed for some time before one may reasonably make up his mind as to what is the etiology of the jaundice.

Whenever acute cholangitis occurs as a complication of acute cholecystitis the indications for treatment are the same as those of acute cholecystitis without complicating cholangitis, that is, the same medical measures and later surgical intervention with removal of the gallbladder if possible or otherwise cholecystostomy with exploration of the common duct and adequate drainage since it is the cholecystitis that represents the primary focus of infection which has spread to the liver. Surgical intervention alone may result in a complete cure of the complicating cholangitis, but it is desirable as stated before to use penicillin also. Furthermore in cases in which it is certain that biliary obstruction is not complete as evidenced by the presence of bile in the stools and urobilinogen in the urine, the administration of one of the dehydrocholic

acid preparations may help to wash out the infection by producing increased drainage of bile from the liver.

MALIGNANT TUMORS OF THE GALLBLADDER

Malignant tumors of the gallbladder are of importance so far as the liver is concerned because of their extension and spread into the liver. Primary malignant tumors of the gallbladder are chiefly carcinomas and more rarely sarcomas. It is estimated that cancer of the gallbladder constitutes approximately five or six per cent of all cases of carcinoma of the human body. It occurs more frequently than does cancer of the bile ducts themselves. In a series reported by Deaver and Bortz¹⁸ in a study of 903 cases of gallbladder disease, cancer was found in 1.5 per cent. In another series reported by Smithies¹⁹ of 1,000 cases of gallbladder disease, cancer occurred in 2.3 per cent, or 23 cases.

Cancer of the gallbladder occurs more frequently in women than it does in men, undoubtedly due to the fact that gallstones occur more frequently in women than they do in men, for it has been shown that anywhere from 60 to 95 per cent of the gallbladders with carcinoma also contain gallstones. Therefore, it appears that the presence of gallstones in such a high percentage of gallbladders with carcinoma has something to do with the production of the carcinoma, and it was the theory of Ewing²⁰ that "mechanical irritation of calculi, the relation to a peculiar form of lipid metabolism (cholesterol), and the irritative and digestive action of bile, seem to combine in producing the remarkable susceptibility of the mucous membrane to cancer."

The types of cancer found in the gallbladder may be represented by a fungating growth, a gelatinous type and a diffuse scirrhouss type of carcinoma, with metastasis occurring especially to the liver.

Because of the presence of gallstones in the majority of carcinomatous gallbladders, there is usually a preceding history of symptoms that suggest cholecystitis. There may be tenderness in the right upper quadrant in the area of the gallbladder and later on in this area a palpable mass may be made out in some of the cases. Jaundice occurs chiefly as the result of massive metastasis to the liver, or when it is associated with a chronic cholangitis from the presence of obstructive stones in the common duct. Ascites may occur later on in the course of the disease if there is considerable pressure upon the portal vein by metastatic growth.

Fever may be present. In the case of cholangitis it may reach 102° or 105°F, and when cholangitis is absent it is apt seldom to run over 100° to 101°F. There is generally pain in the area of the gallbladder which may be felt upon stooping over or upon pressure with the hand and may radiate around to the back. Sometimes it develops upon taking a deep breath. At other times the pain may be accompanied by colic which may be severe and radiate around to the back, upward into the right shoulder. The presence of a hard nodular painful tumor in the region of the gallbladder associated with loss of appetite, loss of weight and anemia, and a history suggestive of previous cholecystitis may well be the basis for a presumptive diagnosis of carcinoma of the gallbladder. However, when the carcinoma is of the scirrhouss type it may not be palpable. X-ray diagnosis may reveal the presence of gallstones if some dye passes into the gallbladder but too often the gallbladder is non-functioning and unless the stones contain calcium they will not be opaque to x-rays and therefore visible. Finally a diagnosis is only certain by surgical exploration and the examination of the gallbladder.

Surgical treatment provides only slight hope of cure in those cases which are operated upon before there is evidence of metastasis, and if metastasis has occurred, then

surgery should be limited to simple exploration and closure.

Primary sarcoma of the gallbladder is very rare and deserves very little consideration here since its symptomatology does not differ characteristically from that produced from carcinoma of the gallbladder.

SUMMARY

In the past twenty-five years we have seen a period of many experimental, pathological and clinical investigations describing a particular kind of hepatitis known as periportal inflammation. Some investigators attempted to associate this hepatitis with cholecystitis either as the cause of it or as the result of cholecystitis, but now the general opinion is that the hepatitis results from many general infections. However acute cholecystitis may lead to disease of the liver whenever the complications of either perforation with abscess formation or cholangitis occur. Also primary malignant tumors of the gallbladder spread to the liver. By these means the gallbladder plays a rôle in the production of disease of the liver.

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Ménière's Disease.—The well-known French otologist, Prosper Ménière, was a follower of the school of J. M. G. Itard. He is best remembered by the syndrome to which his name has been given. Besides his scientific contributions on the anatomy and affections of the ear, he wrote books and articles that bear such interesting titles as "Ciceron as a Doctor," "Consultations of Madame de Sévigné," and "Medical Studies on Latin Poets." —Warner's *Calendar of Medical History*.

A stomach that is seldom empty despises common food.
(*Jejunus raro stomachus vulgaria temnit.*)

—Horace, *Satires*. Bk. II, sat. 2, l. 38.

INFECTIONS OF THE LIVER WITH SPECIAL REFERENCE TO AMEBIASIS*

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TWO important changes in our basic philosophy concerning amebic infection of the liver are responsible for the recent marked lowering of mortality and morbidity in this condition as noted in many reports of considerable series of cases now appearing in the literature:

1. Recognition that amebic hepatitis and amebic hepatic abscess constitute a special kind of liver necrosis¹ produced by the invasion of a micro-organism, the endameba histolytica, for which there is a specific remedy, emetine. The situation is comparable to the development of a gumma in the liver caused by the spirochaeta pallida against which the arsenicals and bismuth are specific.

2. Repeated demonstration that where, because of pyogenic infection complicating amebic hepatic abscess, open drainage of such abscess is required, it is absolutely imperative that such drainage be performed in a manner to avoid contamination of pleural or peritoneal cavities.

Renewed emphasis falls upon amebiasis at this time because of military operations conducted throughout the world, but particularly with reference to tropical contacts. That amebiasis is not a tropical disease but is widely prevalent in this country has long been recognized by gastro-enterologists. Craig² estimated that from five to ten per cent of our population harbor the ameba in the intestinal tract, while Faust³ places this incidence at about twenty per cent. It is believed that four to five per cent of those so infected will present hepatic complications. Thus, if Faust's figure of twenty per cent infestation for our population is accepted, some twenty-five million instances of amebiasis may be said to be present in this country with the probability that something over a million of them will develop amebic hepatitis or amebic hepatic abscess. Should there be any increased infection rate on the general population as the result of the importation of ameba from our military contacts, these figures would naturally have to be revived upward.

PATHOLOGY

Etiology.—All authors stress the predominance of males to the extent of 90-95 per cent in amebic hepatic involvement, and the ages most commonly affected as the second to the fifth decade. Probably all instances are preceded by involvement of the colon, but such involvement may antedate the development of liver complications by a few days, months or even years, and such colonic involvement may be entirely asymptomatic in as high as 50 per cent of the cases.

Pathogenesis and Pathology.—The ameba may invade the liver by (1) direct extension through the bowel wall and peritoneal cavity; (2) through the lymphatics; (3) through the portal vein, the last route being by far the most common. Intrahepatic portal thrombosis occurs directly as the result of amebic action; the ameba also have a direct cytolytic activity on the liver parenchyma. The process may be arrested at this early stage either by treatment or spontaneously in certain instances, or it may progress to the formation of true abscess in which there is a central area of colligative necrosis surrounded by a thick fibrous capsule. The uncomplicated amebic abscess is sterile, and upon this important fact is based our rationale of treatment.

Abscesses are usually single, occur most often in the

right lobe and usually in the dome of the right lobe. However, multiple abscesses may occur and infrequently abscesses are present in the left lobe of the liver. Associated pathological features consist of secondary infection of the abscess with pyogenic cocci and/or the colon bacillus; rupture of the abscess into the subphrenic space, the subhepatic space, pleural cavity, lungs, bronchus or general peritoneal cavity.

SYMPTOMS AND SIGNS

The symptoms and signs vary in intensity and degree depending upon whether the condition is acute, subacute or chronic in its onset. Typically, there are low grade intermittent or remittent fever, pain in the right upper abdominal quadrant, sometimes referred to the right shoulder, chills, and in the severe instances with complicated abscesses, drenching sweats. There may be a subicteric tint to the skin. The abdominal findings consist of rather well defined tenderness over the right upper quadrant, together with some degree of enlargement of the liver. Infrequently an abscess may be felt pointing below the right costal margin. In the instances where the abscess is in the posterior portion of the liver on the right side there is tenderness over the eleventh and twelfth intercostal spaces and the right costo-vertebral angle.

Laboratory Findings.—In the uncomplicated hepatitis or amebic abscess, there is a moderate leucocytosis without a concomitant increase in the polymorphonuclear leucocytes. Typical counts vary from thirteen to sixteen thousand white blood cells per cubic millimeter with polymorphonuclears between 70 and 75 per cent. The finding of the ameba histolytica in the stool in such a patient is practically diagnostic, but the percentage of positive findings varies over so wide a range in proved cases of amebic hepatic involvement that negative stool findings are not to be considered too seriously. Fluoroscopic and x-ray examinations are particularly important in diagnosis. The right sheath of the diaphragm is elevated and fixed and there is usually obliteration of the anterior costophrenic and cardiophrenic angles.

DIAGNOSIS

Diagnosis is based upon a careful history involving the onset, related intestinal disturbances, physical signs as above described, together with corroborative x-ray and other laboratory findings. Inasmuch as the treatment depends very fundamentally upon the nature of the condition of the liver, whether it be hepatitis, uncomplicated abscess or an abscess secondarily infected with pyogenic organisms, too great care cannot be exercised in establishing this point before treatment is instituted. Other conditions to be considered are: subphrenic and subhepatic abscess due to gastric or duodenal perforations; infections of the gallbladder, infections of the urinary tract, chronic pulmonary disease such as tuberculosis or lung abscess; brucellosis, septicopyemia from whatever cause; pylephlebitis with multiple pyogenic abscesses of the liver. In each of these conditions, appropriate history and confirmatory laboratory data are sought and evaluated.

TREATMENT

Practically all cases of amebic hepatitis and many instances of uncomplicated abscess will respond to emetine therapy alone. This drug is given as emetine hydrochloride intramuscularly or intravenously, one grain daily for a period of from six to ten days.

Should such a course of treatment not result in marked improvement, aspiration of the abscess is indicated. As stated previously, uncomplicated amebic abscesses are sterile and it is extremely important that no infection be introduced from without. Therefore, the

* Read before a joint meeting of the Sections on Medicine and Surgery at the Seventy-fourth Annual Session of the California Medical Association, Los Angeles, May 6-7, 1945. One of four papers in a panel discussion on Diseases of the Liver.

technique of aspiration should be performed under strict aseptic conditions, preferably in an operating room where if the aspiration presents indication for it, further and more extensive drainage may be undertaken at once. Aspiration should be performed directly into an abscess that presents below the costal margin. If the abscess is not palpable, but has been localized by fluoroscopic and x-ray examinations, there are three usual sites of such locations and three methods of approach.

First, for an abscess located in the anterior portion of the liver, the needle is inserted below the anterior costal margin about 4-6 cms. lateral of the midline and is directed superiorly and posteriorly into the abscess cavity. A blunt needle such as a cerebral ventricle needle is used for the purpose. As much of the abscess contents as possible is aspirated and some of the substance examined immediately by microscope. The characteristic fluid obtained from an uncomplicated abscess is described as resembling anchovy or chocolate sauce in color. If there are many bacteria and pus cells present in the smear, these findings are indicative of secondary infection and may require open drainage. However, in such instances a course of sulfonamide and penicillin therapy should be given a thorough trial before open drainage is performed. Needless to say before each aspiration, the patient should receive emetine for a minimum of four days.

For abscesses located in the posterior portion of the liver, the exploring needle is inserted in the right lumbo-costal angle and is directed superiorly and anteriorly to the abscess cavity.

For an abscess located near the dome of the liver, the needle is inserted through the ninth or tenth intercostal space in the anterior axillary line and directed superiorly.

The only dangers of aspiration are: 1. Spread of infection. 2. Hemorrhage. These dangers are minimized by careful technique. No irrigation of the abscess cavity is attempted nor is any antiseptic substance introduced into it.

In those abscesses complicated by pyogenic organisms which do not respond to sulfonamides and/or penicillin therapy, open drainage is essential. The chief cause of the high mortality formerly associated with open drainage was the infection introduced into the pleural or peritoneal cavity. To avoid this complication, open drainage is performed in such a way as to avoid these two serous cavities. The technique is the same as that employed for the extra-serous drainage of subphrenic or subhepatic abscesses. For such an abscess located anteriorly the Clarmont procedure is performed. This consists of a subcostal incision parallel to the costal margin cutting across the oblique muscles and the transversalis fascia and approaching the abscess extraperitoneally by mobilizing the parietal peritoneum from the lower surface of the diaphragm. For an abscess that is located posteriorly, the Ochsner approach utilizes this principle of avoiding the pleural and peritoneal cavities. The twelfth rib is resected subperiostially. An incision is made through the bed of the twelfth rib at a level of the spine of the first lumbar vertebra. The retroperitoneal tissue is dissected bluntly until the peritoneum is encountered which is then separated from the under surface of the diaphragm until the region of the abscess in the posterior portion of the liver is reached. Ochsner and De Bakey⁴ in recent articles have emphasized the great reduction in mortality accomplished by this extraserous method of drainage as compared with methods formerly in use in which so often the pleural cavity and/or the peritoneal cavity was infected, with fatal results.

Following the successful treatment of amebic hepatitis or amebic abscess by emetine and/or emetine and aspiration therapy, the intestinal amebiasis should be treated by one of the amebicides such as carbarsone, chiniofon, vioform or diodoquin.

PROGNOSIS

According to Ochsner and De Bakey⁵ the most important factors in prognosis are: 1. The multiplicity of lesions in the liver. 2. The presence or absence of complications. 3. The presence or absence of secondary infections. 4. The type of therapy employed.

These authors report a collected series of five thousand cases in which the mortality was 43.1 per cent in those treated with open drainage, and 5.6 per cent in those receiving closed drainage. In their series the mortality was 22.1 per cent for open drainage, and 3.6 per cent for closed drainage. These same authors in quoting a series of eighty-one cases show a mortality of 33.3 per cent for transpleural drainage, 30.4 per cent for transperitoneal drainage, 10.5 for incision and drainage where the abscess pointed superficially, and a mortality of 6.6 per cent where the drainage was extraserous, thus emphasizing all too well the much better result to be obtained when the peritoneal and pleural cavities are avoided.

Little need be said concerning the multiple pyogenic hepatic abscesses occurring as part of the process of septicemia or as a result of ascending pylephlebitis. These are hopeless conditions and the only treatment of any value would be prophylactic. The occasional solitary pyogenic abscess should be treated in the same way as an infected amebic abscess and drained extraserously.

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PORTAL CIRRHOSIS*

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CIRRHOSIS of the liver has presented many complex problems of clinical and pathological physiology for study recently. Because it was formerly considered a virtually hopeless condition, the standard therapeutic attitude in dealing with this disease was essentially one of defeatism. Only in recent times have investigators been able to show the enormous functional reserve of the liver and its phenomenal capacity for regeneration and repair. Furthermore studies on animals treated with hepatotoxic agents have demonstrated the possibility of recovery even after the clinical picture of human portal cirrhosis has been produced. Experimental studies also have demonstrated the relation of diet and nutrition to the structure and function of the liver.

THE NUTRITIONAL FACTOR IN CIRRHOSIS

To review the clinical and experimental evidence bearing on the point that cirrhosis of the liver is a deficiency

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disease would greatly exceed the scope of the paper and only a few of the more important contributions will be mentioned.

The relationship of alcoholism to cirrhosis is well known; yet cirrhosis develops in only a small percentage of cases of chronic alcoholism and the disease cannot be reproduced experimentally in dogs who are given alcohol continuously in large quantities. Connor⁶ suggested years ago that an inadequate intake of food might explain the susceptibility of some human beings to liver damage by alcohol, a point on which all students of the subject now agree. Patek^{19, 20} and others, noting that alcoholic beriberi and pellagra resembled in all respects the endemic forms of these diseases, conceived the idea that the correlation between alcoholism and cirrhosis might likewise depend on nutritional deficiencies. There is now ample clinical evidence to support this view. An inquiry into the dietary habits of many chronic alcoholics with liver disease will reveal that their intake of food is deficient in many respects. It is not remarkable that such patients also may have a variety of associated vitamin deficiency states which may be due not only to poor diet but to failure of absorption, storage and intermediate metabolism of vitamins because of associated liver damage.

In certain parts of the world cirrhosis is endemic; this possibly is due to nutritional disturbances. Snapper,²⁴ in commenting on the great frequency of cirrhosis in North China, stated that malnutrition is certainly one of the principal factors in the development of the disease. Hardiker and Gopal Rao¹² recently have reported a high incidence of cirrhosis of the liver in southeastern India where rice is the principal ingredient of the diet and have commented on the fact that in parts of India where Jawar and wheat constitute the staple diet, liver disease is relatively rare. Among South African Negroes who subsist chiefly on a meager diet of corn and fermented cow's milk, the incidence of both deficiency disease and cirrhosis is high. Gilbert and Gillman⁹ have noted this fact and have shown that cirrhosis developed in rats fed the natives' diet.

Experimental evidence supporting the deficiency theory of the etiology of cirrhosis is abundant. György and Goldblatt^{10, 11} noted that parenchymatous and fatty degeneration, necrosis and sometimes fibrosis developed in the livers of rats maintained on a diet deficient in the vitamin B complex. These changes were prevented by the addition of yeast or yeast extract to the diet. Rich and Hamilton²³ have shown that a diet adequate in respect to all its essential constituents and containing adequate amounts of thiamine chloride, nicotinic acid, riboflavin and vitamin B₆ was capable of producing marked hepatic cirrhosis in rabbits. Animals, fed exactly the same diet but with yeast substituted for the various individual components of the B complex, did not develop hepatic lesions. Various other workers have shown that riboflavin or thiamine deficiency alone will under certain circumstances produce fatty change in the liver. Hepatic functional disturbances also have been produced by somewhat similar types of experimentally deficient diets. Work along these lines is being continued and extended and all investigators now agree that an inadequate intake of protein and certain components of the B complex will produce liver damage or render the liver vulnerable to experimentally administered hepatotoxic agents (dichloro-ethane, dichloropropane, carbon tetrachloride, halowax and others).¹⁷

Recently attempts have been made to identify the component of B complex, deficiency of which is specifically responsible for the development of cirrhosis. Since fatty infiltration of the liver is among the earliest of pathologic changes in cirrhosis, it is natural that attention should have been paid to lipotropic substances

in this respect. Choline and also methionine have been shown to have a protective effect in cirrhosis induced in laboratory animals. Cystine has a similar effect and the combination of cystine plus choline appears to have extraordinary protective effects against hepatotoxins. Casein digests also have a considerable protective action under similar conditions possibly because of the combination of cystine and methionine which such digests contain. The clinical application of these observations gives promise of major improvements in the treatment of the disease.

THE RECOGNITION OF CIRRHOSIS

The matter of diagnosis obviously becomes more important with the advent of new therapeutic methods. The clinical picture of far advanced cirrhosis of the liver can be recognized by any medical student. However, in many early cases the disease may pass undetected for long periods and the diagnosis is often difficult.

The common signs and symptoms of cirrhosis are so well known that their enumeration is scarcely necessary. Periodic digestive upsets characterized by anorexia, nausea, vomiting and gaseous distention are among the most common initial complaints. When a patient complains of these, an inquiry should be made into his alcoholic and dietary habits, exposure to chemicals, previous episodes of jaundice, edema, hematemesis and finally into the possibility of exposure to schistosomiasis. Weakness and loss of weight appear relatively late in the course of the disease and may be accelerated prior to the appearance of ascites, which occurs in approximately two-thirds of all cases. The appearance of ascites may be preceded, followed by or associated with edema of the lower extremities and genitalia. Jaundice which is often of too slight degree to attract the patient's attention occurs at some time in perhaps four out of five cases. Hematemesis or other signs of a tendency to bleed, such as hematuria, also are common.

Other symptoms of the disease which are not so well known deserve more general recognition. Among these are bouts of abdominal pain which, because of their severity and the not infrequent association of jaundice, have been known to raise the suspicion of common duct stone. Irregular fever of low grade is also a fairly common early symptom; it appears to be associated with destruction of liver cells and not necessarily with a complicating infectious disease. Neurologic symptoms are likewise more common than is generally believed. These include a wide range of complaints from mild psychogenic disturbances to deep coma.

Among the less commonly recognized physical signs are three which merit attention. These are (1) loss or absence of pectoral hair in males, (2) a curious erythema of the palms, a finding which is common but which is not necessarily specific for cirrhosis and (3) spider hemangiomas over the distribution of the superior vena cava. These hemangiomas, which have been thought to be due to the failure of the liver to inactivate androgenic materials and 17-ketosteroids, are, for practical purposes diagnostic of cirrhosis and should be sought for in every case in which it is suspected. They vary in size but the definite pulsation in their central portion and the dilated web of capillaries which surround them make them easy to identify.

A number of special procedures are of assistance in proving the presence of cirrhosis. Among these by all odds the most valuable is peritoneoscopy. This procedure

is performed easily and may be done at the time of paracentesis. It carries a small surgical risk (most of the recorded catastrophes following it have been due to intraperitoneal bleeding). It has the great advantages of permitting direct visual inspection of the liver as well as the opportunity of removing a specimen for biopsy from a selected part. It also permits the exclusion of such commonly associated conditions as tuberculous peritonitis and primary hepatic malignancy.

Another method of obtaining specimens of the liver for biopsy should be mentioned. Needle biopsy through the thoracic or abdominal wall was first performed about fifty years ago; two Scandinavian investigators, Iversen and Roholm¹⁴ later rediscovered the method and called it to physicians' attention. The development of the Vim-Silverman needle by Tripoli and Fader²⁶ in 1941 has greatly facilitated satisfactory liver biopsy by this method. The procedure is now in standard use in at least one university clinic¹⁵ and will undoubtedly be used more widely in the future. The information obtained by histologic examination of liver tissue is invaluable and supersedes all other procedures in reaching a diagnosis.

Hematemesis occurs at one time or another in about half of all cases of portal cirrhosis. Its sources are almost invariably the dilated esophageal veins which form as a result of portal venous obstruction of long standing. Their presence should be sought for in every known or suspected case of cirrhosis. By the use of a thick barium mixture, these dilated vessels can be demonstrated roentgenologically in a majority of cases in which they are present. Their direct visualization can be accomplished through the use of the esophagoscope. Demonstration of these dilated veins is practically diagnostic of cirrhosis even if most other symptoms and signs are lacking.

The roentgen visualization of the general structure of the liver by means of thorium dioxide (thorotrust) is invaluable in certain cases, particularly when it is essential to exclude the possibility of metastatic lesions. Metastatic lesions are visualized as negative shadows, as are also gummas. Cirrhosis gives a definite roentgenologic picture; the liver has a finely mottled appearance suggestive of ground glass. It was formerly believed that visualization with thorotrust carried some risk because of the radioactive character of the material used. However, the experience of many workers has shown that the radioactive effect of thorotrust is not clinically significant in the type of case in which it is generally used.

Liver function test.—These tests are useful for demonstrating injury to the parenchyma of the liver but they do not necessarily establish either the type or degree of damage present. After more than twenty years of search for a single test which would give the desired information, most investigators have reached the conclusion that it is wise to depend on two or three general tests carefully performed. The three most often recommended which have satisfied critical investigators are (1) the cephalin-cholesterol flocculation test, (2) the hippuric acid test for liver function, which may be determined by either the oral or intravenous administration of sodium benzoate and (3) one of the various modifications of the bromsulfalein test. The first mentioned test requires considerable care in its performance and difficulties may arise because of technical problems in connection with the preparation of a uniform cephalin antigen of a proper degree of sensitivity. If the test is used, controls must be employed. False positive results have been observed in the presence of various diseases not involving the liver, among which may be mentioned allergic or puerperal states. The hippuric acid

test is of limited value in the presence of renal insufficiency but when this condition can be excluded, it is satisfactory and gives a reasonably good idea of the total mass of functioning hepatic cells. Most recent reports on this test appear to indicate that the intravenous method of administration is preferable to the oral, and, in fact, the test is rated as about twice as sensitive when the intravenous method is employed. The bromsulfalein test, using a dose of 5.0 mg. per kilogram of body weight, is still one of the most satisfactory tests of liver function. Readings at the end of forty-five and sixty minutes are recommended by Mateer and co-workers.¹⁶ The test is of no value in the presence of clinically recognizable jaundice but if this limitation is kept in mind, it is one of the most useful in the early diagnosis of cirrhosis.

For maximal accuracy in liver function studies, the "profile" method advocated by Watson²⁸ is recommended. This method employs practically all the known standard tests of liver function; specific groups of tests are designed for both jaundiced and nonjaundiced patients and there are supplementary tests which are applicable to both types of patients. Because of expense, time and technical difficulties, this method of study doubtless will have to be confined to clinics with special facilities. As Watson and his collaborators¹⁸ pointed out in their most recent report, certain types of cirrhosis or other hepatic diseases show a fairly characteristic "profile" on the chart giving composite results of the tests of liver function. They also pointed out wisely that even these detailed studies of liver function will never do more than supplement the history and physical examination in a given case, a statement which generally applies to all methods of functional study of the liver.

PROGNOSIS

Cirrhosis even when detected at a supposedly early date is usually an old and well-advanced disease. It is unfortunately only rarely suspected before the onset of jaundice, ascites or hemorrhage. When one or more of these symptoms have made their appearance, the prognosis is grave and approximately half of all such patients die within a year. Gross hemorrhage, in particular, indicates an unfavorable course.²² In one recently reported series,²⁰ 40 per cent of patients died within one month of the initial hematemesis. However, if a patient survives such a catastrophe for a year, his chances for survival seem to improve somewhat.

Much the same statement may be made in regard to ascites. In two large series of cases studied at the Mayo Clinic^{5, 8} the average duration of life after the appearance of ascites was about fourteen months but two-thirds of the patients were dead at the end of nine months.

The history or physical findings usually present little to indicate what patients may be expected to survive this critical first year. Persistent fever and the early development of neurologic symptoms are of ominous import. The same may be said of deepening jaundice and increasingly rapid accumulation of ascitic fluid. Laboratory methods are, at best, of limited value to the physician in determining the prognosis. Increasing anemia and a falling level for total protein and serum albumin are indicative of an unfavorable outcome. The reverse of this statement is partially true and improvement in the erythrocyte count and level of plasma proteins under treatment is most encouraging. A low level for prothrombin is a fairly common finding in cirrhosis and is not necessarily of great prognostic value. However, the response to vitamin K in such cases is definitely informative. If a fair amount of liver parenchyma remains, the response to administration of the synthetic vitamin may not fall far short of that seen in patients

with obstructive jaundice. Complete failure of response to vitamin K therapy, however, is indicative of extensive damage.¹⁵ High levels for coproporphyrin in urine are also of serious prognostic significance. No clinical findings or combination of functional tests is as important in determining the long range outlook, however, as is the patient's immediate response to treatment.

TREATMENT

Within the past few years there has been a radical change in the therapeutic approach and a modern program of treatment is now based almost entirely on the conception that cirrhosis of the liver is a deficiency disease.

On the basis of the studies mentioned earlier on this point and numerous clinical observations, Patek¹⁹ in 1936 began the treatment of a group of patients who had alcoholic cirrhosis with a highly nutritious diet and large amounts of vitamin B complex. The results which were first reported about eight years ago were most encouraging and have since been confirmed by investigators in many parts of the country. Details of the diets now in use have been modified according to the preference of the investigator. The original Patek diet contained carbohydrate 365 gm., protein 139 gm. and fat 175 gm.; it was made up largely of meat, milk, eggs, fruit and green vegetables and was heavily supplemented with brewer's yeast, thiamine chloride and injectable liver extract. At the Mayo Clinic⁸ a somewhat similar diet containing approximately 500 gm. of carbohydrate, 110 gm. of protein and 60 gm. of fat has been employed. The protein in this diet was derived partly from vegetable and dairy products, chiefly because of an earlier observation that animals with experimentally produced hepatic injury were made worse by the administration of meat and meat extracts. The lower intake of fat in this diet is justified on the grounds that even small increments of fat in the diet make the liver definitely more vulnerable to such toxic substances as carbon tetrachloride (Bollman).³ Maximal quantities of both water and fat soluble vitamins were given. Wade²⁷ has advocated a somewhat similar dietetic program, while Barker¹ has adhered more closely to the original Patek regimen. The ultimate results of treatment reported by workers just mentioned are essentially the same so it seems fair to assume that the essentials of the program are an adequate and palatable diet, rich in carbohydrate and protein and heavily supplemented by natural sources of the vitamin B complex, notably yeast and liver.

Various supplementary measures deserve brief mention. A clinical study of choline and methionine is now being made but it appears to be too early to report any definite results. Patek¹⁸ mentioned one patient whose condition had been resistant to the usual dietetic treatment and who improved greatly after the administration of choline hydrochloride, 4 gm., daily. English investigators^{2,21} have reported encouraging results with methionine. Casein digests have been employed both experimentally and clinically with results sufficiently good to warrant their continued use. Further studies along these lines with especial reference to lipotropic substances promise to add greatly to the therapeutic effectiveness of the dietetic program, particularly in the earlier stages of the disease.

Of special features of the disease.—Most clinicians who have had wide experience with cirrhosis are now inclined to treat the ascites by means of paracentesis and to avoid use of purgatives and diuretics. The latter may be used judiciously in selected cases, the time honored combination of acid-producing salts and organic mercurial diuretics being still in favor. Attempts to relieve ascites by correcting the hypoproteinemia so commonly associated with advanced disease of the liver have been disappointing. The use of plasma, serum albumin and even rein-

jected ascitic fluid have usually failed to produce the desired diuretic effect. In this connection it may be pointed out that some factors other than osmotic and portal pressures may be concerned in the transudation of fluids in this disease. It has been suggested too that the diseased liver may produce specific antidiuretic substances.

The anemia of liver disease is especially refractory to treatment. It may respond somewhat to the injectable forms of liver extract and to iron, but in general it is not much altered until the liver itself regenerates. For this reason, transfusion of blood must be relied on to maintain the patient's hemoglobin.

Coma and other neurologic disturbances associated with hepatic insufficiency may be of nutritional origin and related to two other deficiency states, the encephalopathic syndrome associated with chronic alcoholism and the psychosis of the pellagrin. It is believed that all three of these conditions may be due to a breakdown of enzyme systems associated with carbohydrate metabolism. As is well known, these enzymes derive certain portions of their molecular structure from nicotinic acid and thiamine. In the treatment of hepatic coma, it is logical, therefore, to administer glucose with sufficient quantities of nicotinic acid and thiamine to insure complete utilization. This form of treatment has been productive of good results in a few cases.²⁵

Hemorrhage in cirrhosis requires special consideration. As has been stated previously, the common source of bleeding is from a ruptured esophageal varix. A dangerous hemorrhagic state develops in a small number of cases because of prothrombin deficiency. Neither condition is as yet completely amenable to treatment. Splenectomy, omentopexy and ligation of the coronary vein of the stomach have all been employed with some success in dealing with esophageal varices. Recently the direct injection of these vessels with sclerosing solutions through the esophagoscope has been employed with satisfaction both in this country and abroad,⁷ and it seems likely that some treatment of this type may eventually provide the answer to the problem of esophageal varix provided that the fundamental process in the liver can be controlled.

The severely diseased liver is incapable of utilizing vitamin K to form prothrombin and, therefore, the treatment of hemorrhagic states in cirrhosis is almost totally ineffective except in occasional cases. With improvement in the general state of the liver, the opportunities for successful therapy with naphthoquinone derivatives may increase.

RESULTS

The results of treatment have by far exceeded expectations and patients with proved cirrhosis now have carried on successfully for as long as eight years. The mortality rate from the disease during the first year after the appearance of ascites continues to be high, but it is still vastly less in the treated than in control groups. Patek reported that 45 per cent of his patients have survived for two years,²⁰ and Fleming and I⁸ have reported a substantial group of arrested cases with a survival period of more than two years. A few cases have been recorded in which loss of ascites, edema and jaundice has occurred several times as a result of dietary therapy. As Patek¹⁸ has noted, these successive responses in the same patient "give added significance and dignity to the cause of dietetic therapy." Because of the fact that the disease affects principally persons in the older age groups, and also because of the unpredictable behavior of the alcoholics who make up a large proportion of the group under consideration, the long range prognosis is not particularly good. It is an extremely difficult matter to make many of these patients follow the prescribed diet and the sicker patients require the best of nursing and dietetic care. With patience and persistence, however, much may

be accomplished. It is obvious that the disease is as a rule detected only in its latest stages and that much earlier diagnosis will be required if the current figures of mortality and morbidity are to be greatly improved.⁴ In the earlier stages of the disease when the liver is presumably affected chiefly by fatty degeneration and the portal circulation is not greatly restricted, the results of therapy should be excellent.

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THE STATUS OF THE LIVER AND ITS IMPORTANCE TO THE SURGEON*

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THE status of the liver and its importance to the surgeon constitutes an exhaustive background for discussion. The functionally and histologically disturbed liver is a sensitive criterion of the degree of damage resulting from many extra hepatic pathological states. Many diseases and many agents result in degenerative changes in the liver. With progression of the disease, the hepatitis is also insidiously progressive and results finally in some degree of irrevocable fibrosis.

The liver has remarkable reparative capacities. A single major injury or repeated minor injuries may result in no permanent damage because of this extraordinary power of regeneration. Continuation of these injuries, however, will eventuate in a chronic generalized hepatitis because of a failure of these regenerative processes and a replacement of the functioning parenchyma with connective tissue.

A comparatively small remnant of normally functioning liver parenchyma will compensate for the whole in such a degree that there is no depression in the hepatic sufficiency tests nor is there symptomatic clinical evidence of disturbed function. Practically, then, it becomes incumbent upon the surgeon to recognize that liver damage is almost invariably sequential to certain surgical diseases and that restoration of hepatic function should be attempted before the elective surgery is undertaken.

TYPES OF LIVER DISEASE

The most common diseases, either actually or potentially surgical, that eventuate in some degree of hepatic parenchymatous destruction are:

- (1) The infections.
- (2) The benign peptic ulcer.
- (3) Extra-hepatic biliary disease.
- (4) Thyrotoxaemia.
- (5) Gastro-intestinal malignancies.

Infections.—Secondary destruction of liver tissue by infection is not limited to primary peritoneal involvement by the infecting agent. The acute appendix typifies the primary involvement with secondary damage to liver parenchyma through the portal route. Even death may occur without evidences of a spreading peritonitis but with demonstrable depression of hepatic physiology and with gross and histological liver damage.

The acute surgical abdomen may be complicated by concomitant but unrelated diseases that are associated with hepatic involvement. Medical officers with troops are concerned primarily with acute phases of such diseases. The civilian surgeon will be particularly concerned later upon discharge of these service men with the more chronic phases with progressive liver deterioration.¹ These diseases include malaria, sporadic and epidemic hepatitis, leptospiral jaundice or Weil's disease, schistosomiasis and amoebic hepatitis.

Duodenitis with Peptic Ulcer.—Ascending infection from the duodenum through the Ampulla of Vater characterizes the duodenitis associated with peptic ulcer. Here, as in the portal route of conveyance of the infection, parenchymatous destruction is evident and pylephlebitis with concomitant hepatic miliary abscesses is absent.

Extra-hepatic Biliary Disease.—Diseases of the extra hepatic biliary tract and particularly gallbladder disease

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originally stimulated the study of liver sufficiency as it was related to surgical practice. Gallbladder disease is essentially a chronic disease.² Acute cholecystitis does occur, but it is usually an acute exacerbation in a chronically diseased gallbladder. In the perennial controversy over the respective merits of the delayed versus the immediate surgical treatment of acute cholecystitis, neither protagonist adequately considers the effect of depressed liver function on the mortality and morbidity rate in individual cases. In the absence of the accepted criteria for emergent surgical intervention, hepatic function, as estimated clinically and by laboratory data, dictates more reliably the time of surgical intervention.

Thyrotoxaemia.—In thyrotoxicosis, jaundice is clinically evident in about 5 per cent of patients and particularly in the preoperative crisis. Clinical jaundice is evidence of some degree of hepatitis even though our present laboratory tests fail to measure a depression in function. The most progressively restricted hepatic function in thyrotoxicosis is its ability to metabolize and store glycogen. The histological changes in the liver are variously described and are not consistently identical. Three characteristic changes have been described as common to all patients.³

1. Diffuse deposition of fat in the parenchymal cells.
2. Central necrosis of the hepatic cords.
3. Periportal connective tissue proliferation.

Since no proof is available that thyroxine is toxic to the individual cell, the hepatic damage is best explained on the basis of chronic anoxia in a liver already showing increased oxygen consumption and glycogen depletion.⁴

The majority of thyrotoxic patients undoubtedly have only minimal hepatic damage. In that recognizable minority with clinical jaundice or other evidences of liver depression, preoperative preparation and postoperative convalescence are more usually complicated and prolonged.

Gastro-intestinal Malignancies.—Gastro-intestinal cancer results in a high incidence of fatty infiltration and probably glycogen depletion in the liver.⁵ Demonstration of the diminished hepatic function by our present methods is usual in gastro-intestinal malignancy before liver metastasis occurs. Surgical procedures are tedious and prolonged and contribute towards further postoperative depression. These recent studies advance the possibility that "altered hepatic chemical constitution" complicates the risk in gastro-intestinal cancer and that proper preoperative preparation will change hepatic chemistry and increase resistance to hepatotoxins.

In evaluating the liver function tests it must be recognized that any conclusions are altogether relative. A high degree of hepatitis with dysfunction may be present without laboratory evidence in any of the tests. The latent functional activity of liver parenchyma will remarkably compensate for a major loss and there will be no clinical or other evidence of destruction.

The best estimate of functional capacity is obtained from a correlation of laboratory data and clinical findings.

Chemical tests attempt to determine departures from normal in liver metabolism, including bile, protein, carbohydrate, fat and lipid metabolism and the detoxifying and excretory functions of the liver. In recent reports of experimental study,⁶ it was concluded that the bromsulfalein test was the most sensitive in detecting damage while a rise in the serum phosphate value was the second most reliable indication. The prothrombin time was less sensitive but demonstrated damage before the intravenous galactose tolerance test. These findings have not been corroborated clinically.

The hypoproteinemia of hepatitis seems to be selective. As chronicity develops, the serum albumen level becomes more depressed.

COMMENT

The value of the individual liver function test is easily overestimated. However, used in association, more will become depressed as intrinsic damage progresses.

Clinically, in the absence of extra hepatic biliary obstruction, jaundice is evidence of some degree of degeneration and with further deterioration, renal changes become apparent. Latent hepatic disease, with the contributing and evident extra hepatic lesion, probably accounts for the hepatorenal syndrome and the so called liver death.^{7,8} Exploratory evidence of the degree of liver damage is not always reliable in the absence of biopsy.

The details of treatment in depressed hepatic function are not within the province of this discussion. It has long been known that a high fat diet is contra-indicated in the presence of a damaged liver. It has been known, further, that high carbohydrate intake is salutary. These clinical observations have been correlated with the results of experimental investigation. A high concentration of lipid in the liver is pathological, an adequate quantity of stored glycogen is protective but only in the absence of an abnormal content of liver fat.⁵

A high protein intake is clinically beneficial in hepatitis. Recent studies of liver biopsies in surgical patients have furnished a background for this conclusion.⁹ A diet high in protein diminishes the deposition of fat in the parenchymal cells and minimizes hepatic destruction. Experimental studies have demonstrated that certain constituents of protein are more effective than the whole protein. Among these components, choline has been used more extensively both experimentally and clinically and there seems to be good reason for its continued use in diseases associated with liver destruction.¹⁰ There are now commercially available protein hydrolysate products. Our clinical experience has been with Amigen. Amigen is a pancreatic hydrolysate of casein and given slowly in dextrose solution, untoward reactions will be minimized and it is well tolerated.

In addition to high carbohydrate, high protein and low fat intake, preparation must include supplementary vitamins, particularly Vitamin B, and adequate Vitamin K administration.

SUMMARY

Hepatitis with parenchymatous damage is a complicating sequence of many extra hepatic surgical diseases. Latent functional hepatic activity will remarkably compensate for even a major injury and there will be no clinical or other evidences of destruction. Even in the absence of such evidences, some degree of liver damage must be assumed and appropriately treated.

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THE USE OF PRODUCTS OF FIBRINOGEN AND THROMBIN IN OTOLARYNGOLOGY*

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PURIFIED fractions of human fibrinogen and thrombin have been obtained in the course of large scale fractionation of human blood plasma.¹ These proteins in solution, as well as several materials prepared from them, have been employed in surgery. The products, differing greatly in physical properties and the uses to which they are adapted, possess characteristics which are constant and entirely dependent upon the conditions of manufacture.²

Ingraham and Bailey^{3,7} have described the use of fibrin foam and a solution of thrombin as an absorbable hemostatic agent, and the use of fibrin film as a dural substitute or as a means of preventing meningocephaladhesions.⁴ They have also called attention to the great potential usefulness of an admixture in situ of solutions of fibrinogen and thrombin in certain special localities where the resulting clot provides a physiologic adhesive material.³

For use in surgery, fibrinogen and thrombin are obtainable in a commercial product supplied in three bottles. One bottle contains sterile fibrin foam in the form of dry, brittle, firm blocks with a honeycomb structure composed of fibrin with numerous air spaces of varying size. A second bottle contains dried human thrombin while the third bottle contains 30 c.c. of sterile isotonic sodium chloride solution.

Rapid solution takes place when the saline solution is added to the dry thrombin. Pieces of fibrin foam, placed in the thrombin solution, shrink, become rubbery and are immediately available for hemostasis. The proportion of thrombin solution used determines to some extent the consistency of the moistened fibrin foam.

Ordinarily, the dry fibrin foam is divided into pieces of appropriate size and then placed in the thrombin solution but the moistened blocks may also be cut as required with a scissors or scalpel. The rubbery consistency enables the fragments to be molded to conform with the contours of the sites to which they are to be applied. Pieces of fibrin foam adhere to each other but do not fuse. Excess moisture may be removed by sponging and suction with a Frazier tip without dislodging the foam or altering the form to which it has been shaped.

It should be emphasized that while bleeding from numerous small vessels may be controlled by applying thin slices of fibrin foam, arterial hemorrhage requires the usual orthodox surgical methods for its control.

FIBRIN FOAM AND THROMBIN AS HEMOSTATIC AGENTS

As a hemostatic agent, fibrin foam and thrombin possess numerous advantages.^{3,4,7} Since they are prepared from human fibrinogen and thrombin, they are composed entirely of proteins native to human plasma. They rapidly control bleeding from oozing surfaces and veins. Left in place after an operation, they are absorbed with minimal tissue reaction and the location of the fibrin foam can no longer be detected in tissue sections taken one month after operation. Recurrence of hemorrhage is

minimized because the fibrin foam remains in place after hemostasis is obtained. The rapid and complete hemostasis appreciably reduces the operating time. Even when sulfonamides or penicillin are used with the material tissue reactions are unaltered. Fibrin foam with thrombin controls bleeding from tooth sockets of patients with hemophilia and has effected prompt and complete hemostasis in hemophiliacs with lacerations of the tongue and lower extremity.³

USEFULNESS IN OTOLARYNGOLOGICAL SURGERY

The clinical use of fibrin foam and thrombin has demonstrated a wide range of usefulness in otolaryngological surgery. In tonsil surgery they seem destined to play a minor rôle. There has been considerable hesitancy in using fibrin foam in the fossae because of the possibility of aspiration of dislodged fragments.³ Aside from obstruction of bronchi, the absence of reaction to these materials elsewhere in the body would indicate that their mere presence in the lower respiratory tract would be innocuous. The usual surgical methods of controlling arterial bleeding must be used but control of general oozing can be obtained by applying shavings of fibrin foam. Larger pieces of fibrin foam may be introduced into a fossa and secured by suturing the pillars. Unless tension is estimated accurately, the sutures will cut through the fibrin foam and dislodge it. Except in hemophiliacs, the use of fibrin foam and thrombin in tonsillectomy is of limited value.

Although pressure over a bleeding point in *Kiesselbach's area* controls the bleeding, recurrence usually follows removal of pressure. For this reason cauterizing agents such as trichloroacetic acid, chromic acid, silver nitrate or the electrocautery must be used to secure hemostasis. These produce local tissue destruction and thus delay healing. When fibrin foam and thrombin are held over the bleeding point and pressure is maintained for a few moments with a cotton wound applicator, the fibrin foam remains in position when the pressure is released and continues to provide hemostasis. No tissue damage is produced to delay healing.

An entire nostril or both nostrils may be packed with fibrin foam when *epistaxis* occurs from an unidentifiable area. The rubbery consistency of the material enables it to conform to the contours of the intranasal structures. The inability of fibrin foam and thrombin to provide hemostasis in arterial bleeding was demonstrated in one patient in whom the bleeding point could not be located. Both nostrils were packed with fibrin foam and thrombin without controlling the hemorrhage. Even after introducing a postnasal tampon and again packing both nostrils with the moistened fibrin foam, the bleeding continued unabated. Hemostasis was finally obtained by packing both nostrils with gauze saturated with thrombin solution, after a postnasal tampon had been introduced.

By making a small hole in blocks of fibrin foam with thrombin, the thread of a postnasal tampon can be passed through one or more blocks. When the postnasal tampon is drawn into position, the fibrin foam is carried into the posterior nares to exert its hemostatic action.

A wafer of fibrin foam and thrombin placed over the site of the incision at the conclusion of a *submucous resection operation* materially reduces postoperative oozing and prevents gaping of the wound margins.

During the *Caldwell-Luc operations*, the antrum may be entirely filled with fibrin foam and thrombin just prior to suturing the gingivobuccal incision. Additional material may be placed about the nasoantral window within the nostril. Postoperative oozing is thus decreased and the removal of packing with its discomfort and secondary

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hemorrhage eliminated. Sulfathiazole, sulfanilamide or penicillin have been added to the fibrin foam thus introduced without in any way affecting the hemostatic action. Roentgenograms of the operated antra after lipiodol injection have shown that the fibrin foam clot remains largely unchanged for a period of a week or ten days and then undergoes lysis. There appears to be some organization of the clot immediately adjacent to the bony walls. The material is not as rapidly absorbed as in more vascular areas but in the presence of infection rapid lysis occurs and eliminates obstruction to drainage by way of the nasoantral window.

Following *intranasal ethmoidectomy*, the application of fibrin foam to the operated area controls bleeding not of arterial origin. Much of the customary oozing may be controlled. In *external sinus surgery* the judicious use of fibrin foam reduces dead space and materially improves the cosmetic result.

Capillary and venous oozing from the soft tissues during *mastoideectomy* which continues after ligation of bleeding points is promptly controlled by the application of thin shavings of fibrin foam and thrombin. The positive hemostasis and the provision of a dry field materially reduces the operating time. Particles of the same material serve as a substitute for bone wax providing that they remain in position when applied with pressure.

In two patients, fibrin foam and thrombin introduced into the opened lateral sinus after the removal of the primary clot, reduced the amount of packing required to maintain hemostasis and there was less fear of hemorrhage when the gauze packing was removed.

Solutions of fibrinogen and thrombin, rather than the products manufactured from them, have been used in *skin grafting*.^{3,5} These solutions are effective in the control of *nasal hemorrhages* in patients with leukemia and other blood dyscrasias. They are usually painted or sprayed on the mucous surfaces or used to impregnate gauze packing.³ They are preferable to tonsillectomy because they obviate the aspiration of solid material but are rarely necessary to reinforce the customary methods of hemostasis except in patients with blood dyscrasias. When sprayed on bone after the removal of the lining mucosa of the sinuses, they provide a dry field for further exploration.

FIBRIN FILM

Fibrin film is a plasma plastic with characteristics recommending its use in many otolaryngological procedures. It is a strong, translucent, pliable, elastic material prepared from solutions of fibrinogen and thrombin under conditions differing from those employed in producing fibrin foam.⁶ It has been used extensively in the preparation of artificial ear drums. When applied to the tympanic membrane the film adheres readily and in the absence of infection in the middle ear will remain attached for long intervals. Catheterization and inflation of the eustachian tube dislodges the film and enables the margins of the perforation to be freshened before a new film is applied.

Unintentional tears in the mucous membrane during the course of a submucous resection operation can be covered by a disc of fibrin film which adheres promptly, exerts some hemostasis and approximates the cut edges. With reasonable care it is not detached in the course of subsequent packing.

Fibrin film offers a new medium in the repair of septal perforations. It may be introduced between the undermined tissues about the perforation and additional sheets of film applied on either side of the defect. In the case of large perforations it is difficult to apply and under-

goes lysis before repair is complete. In these it may be necessary to use a sheet of mucous membrane obtained from an inferior turbinate. The fibrin film is then used to provide a protective covering on both sides of the septum. The process may require repetition and will fail in very large perforations or those due to vascular or systemic disease.

*Fibrinogen plastic*⁶ is another plasma product which deserves further clinical application. It is adaptable in shape and consistency to meet the requirements of a supporting or splinting material and is completely absorbed without residual cellular alterations. In the management of some fractures of the nasal bones, sinus walls and in some plastic procedures, fibrinogen plastic will eliminate the necessity of external fixation.

CONCLUSIONS

1. Fibrin foam with thrombin is a valuable hemostatic agent in otolaryngological surgery.
2. Solutions of fibrinogen and of thrombin are useful in areas where the presence of fibrin foam raises the possibility of aspiration.
3. Fibrin film is adaptable to the manufacture of artificial ear drums and to the plastic repair of septal perforations.

Santa Margarita Ranch Hospital.

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Parkinson's Disease.—A permanent place in medical history has been assured James Parkinson for his "Essay on the Shaking Palsy," written in 1817. It was he, too, who gave the first report in English on a case of appendicitis, this being also the first in which the cause of death was attributed to perforation. Aside from his medical interests, he was a writer of political and controversial pamphlets and, as an able geologist and paleontologist, he contributed important works on fossil remains.—Warner's *Calendar of Medical History*.

Peace, commerce, and honest friendship with all nations,—entangling alliances with none.

—Thomas Jefferson, *First Inaugural Address*,
4 March, 1801.

CALIFORNIA MEDICAL ASSOCIATION

This department contains official notices, reports of county society proceedings and other information having to do with the State Association and its component county societies. The copy for the department is submitted by the State Association Secretary, to whom communications for this department should be sent. Rosters of State Association officers and committees and of component county societies and affiliated organizations, are printed in the front advertising section on pages 2, 4 and 6.

CALIFORNIA MEDICAL ASSOCIATION†

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† For complete roster of officers, see advertising pages 2, 4, and 6.

OFFICIAL NOTICES

EXECUTIVE COMMITTEE OF THE CALIFORNIA MEDICAL ASSOCIATION

Minutes of the One Hundred Ninety-third (193d) Meeting of the Executive Committee of the California Medical Association

The one hundred ninety-third (193d) meeting of the C.M.A. Executive Committee is recorded as a vote-by-mail meeting, the decisions having been reached by telephone intercommunication on June 8, 1945, with subsequent ratification of minutes by mail by Doctors Gilman, McClendon, Askey and Cline.

1. Roll Call of Voting Members:

President and Council Chairman Philip K. Gilman; President-Elect Sam J. McClendon, Speaker E. Vincent Askey, John W. Cline, Chairman of the Auditing Committee.

2. Concerning Senate Bill 1306:

Dr. John W. Cline, after conference with President Gilman authorized Dr. Gilman to telephone to President-Elect Sam J. McClendon and Speaker E. Vincent Askey, relative to request submitted by the Chairman of the C.M.A. Committee on Public Policy and Legislation, Dr. Dwight H. Murray of Napa, concerning Senate Bill 1306. S.B. 1306, introduced on June 2, 1945, by State Senator Arthur H. Breed of Oakland, contained provisions that could make for complications in the development of medical service plans in California.

After exchange of opinion the four members of the C.M.A. Executive Committee unanimously agreed that the C.M.A. Committee on Public Policy and Legislation should be instructed to oppose S.B. 1306, and President Philip K. Gilman and Messrs. John Hunton and Howard Hassard were delegated to oppose S.B. 1306 at the Senate Committee hearing on Monday, June 11, 1945.

JOHN W. CLINE, M.D.,
Chairman, C.M.A. Executive Committee,
GEORGE H. KRESS, M.D.,
Secretary, C.M.A. Executive Committee.

Minutes of the One Hundred Ninety-fourth (194th) Meeting of the Executive Committee of the California Medical Association

The 194th meeting of the C.M.A. Executive Committee is recorded as a vote-by-mail meeting, decisions having been reached by telephone intercommunication on Tuesday, June 24, 1945, with subsequent approval of minutes by mail vote of Doctors Gilman, McClendon, Askey and Cline.

1. Roll Call of Voting Members:

Philip K. Gilman, President and Chairman of the Council; Sam J. McClendon, President-Elect; E. Vincent Askey, Speaker, and John W. Cline, Chairman.

2. Proposal to Establish a Nevada Physicians' Service:

The conference was held to present a report upon a meeting held with members of the Nevada State Medical Association. A plan was discussed whereby a Nevada

Physicians' Service would be established in the State of Nevada, the same to begin its work as a regional group to be administered (temporarily as such), through California Physicians' Service.

3. Action Taken:

In order to make possible the institution of the plan whereby another voluntary prepayment group would come into operation through cooperation with its constituent State medical association, at the request of California Physicians' Service, the Executive Committee, voted that the California Medical Association loan to California Physicians' Service the sum of \$300.00 per month, for a period not longer than twelve (12) months (if necessary), to place Nevada Physicians' Service on a working foundation.

Further, the said loan from the C.M.A. to C.P.S. to be repaid by California Physicians' Service within a period of some thirty-six (36) months after the completion of the aforesaid loan.

JOHN W. CLINE, M.D.,
Chairman, C.M.A. Executive Committee,
GEORGE H. KRESS, M.D.,
Secretary, C.M.A. Executive Committee.

Proposed Amendment to C.M.A. Constitution Re: Ex-officio Members of Council

For action taken on this resolution, see below.

Be It Resolved, That the first paragraph of Section 1, Article VII, of the Constitution of the California Medical Association be amended to read:

"The Council shall consist of the Councilors, and ex-officio: The President, the President-elect, the Speaker and Vice-Speaker of the House of Delegates, each with all the rights of a Councilor."

Resolved, That the first paragraph of Section 4, Article X of the Constitution of the California Medical Association be amended to read:

"The President, President-elect, the Speaker and Vice-Speaker of the House of Delegates shall be ex-officio members of the Council with all the rights of Councilors."

SPEAKER ASKEY: This is an Amendment to the Constitution and By-Laws and must lie on the table for one year and must be published twice during the year in the *Official Journal*. It is so referred to the Association Secretary to be laid on the table and published as required by the By-Laws.

(For reference in minutes of House of Delegates, see June CALIFORNIA AND WESTERN MEDICINE, page 327.)

COUNTY SOCIETIES†

CHANGES IN MEMBERSHIP

New Members (16)

Alameda County (1)

Siebert, Alfred A., *Oakland*

Contra Costa County (2)

Dunphy, John, *Richmond*

Loewenstein, Edith, *Pittsburg*

Fresno County (3)

Freeto, F. R., *Fresno*

Nelson, George A., *Fresno*

Tostenson, Norman E., *Fresno*

Humboldt County (1)

Reicher, Jacob, *Eureka*

† For roster of officers of component county medical societies, see page 4 in front advertising section.

Sacramento County (2)

Carter, Kenneth L., *Sacramento*

Kassis, John, *Sacramento*

San Diego County (3)

Peters, Lindsay, *San Diego*

Sargent, Willard Snow, *San Diego*

Shea, Paul A., *San Diego*

Santa Clara County (3)

Ahnlund, Nels W., *San Jose*

Bellinger, S. B., *Agnew*

Cleveland, Luella S., *San Jose*

Tulare County (1)

Brady, R. F., *Visalia*

In Memoriam

Brown, Beaumont. Died at Sacramento, July 2, 1945, age 68. Graduate of the College of Physicians and Surgeons of San Francisco, 1904. Licensed in California in 1924. Doctor Brown was a member of the Sacramento Society for Medical Improvement, the California Medical Association, and a Fellow of the American Medical Association.



Cochran, George Vrooman. Died at Oakland, July 2, 1945, age 48. Graduate of the University of California Medical School, Berkeley-San Francisco, 1931. Licensed in California in 1931. Doctor Cochran was a member of the Alameda County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.



Craig, Stephen Adelbert. Died at Ontario, June 26, 1945, age 52. Graduate of the College of Physicians and Surgeons, Los Angeles, 1919. Licensed in California in 1920. Doctor Craig was a member of the San Bernardino County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.



Fesca, Helmut William. (First Lieutenant, United States Army.) Killed in action in Germany, July 27, 1944, age 27. Graduate of the University of California Medical School, Berkeley-San Francisco, 1943. Licensed in California in 1943. Doctor Fesca was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.



Green, Martin Icove. Died at San Francisco, June 30, 1945, age 46. Graduate of the College of Physicians and Surgeons of San Francisco, 1921. Licensed in California in 1921. Doctor Green was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.



Inman, Jesse Headen. Died at Bakersfield, July 15, 1945, age 44. Graduate of the University of California Medical School, Berkeley-San Francisco, 1929. Licensed in California in 1929. Doctor Inman was a member of the Kern County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

Krout, Boyd Merrill. Died at Stockton, May 4, 1945, age 60. Graduate of Harvard Medical School, Boston, Massachusetts, 1913. Licensed in California in 1919. Doctor Krout was a member of the San Joaquin County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.



Phillips, Charles Eaton. Died at Los Angeles, June 15, 1945, age 65. Graduate of the University of Illinois College of Medicine, Chicago, 1903. Licensed in California in 1912. Doctor Phillips was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.



Strong, Kenneth Clark. Died at Inglewood, July 3, 1945, age 42. Graduate of Stanford University School of Medicine, Stanford University-San Francisco, 1932. Licensed in California in 1932. Doctor Strong was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.



Tully, John James. Died at Stockton, June 4, 1945, age 83. Graduate of the Cooper Medical College, San Francisco, 1886. Licensed in California in 1886. Doctor Tully was a Retired member of the San Joaquin County Medical Society, and the California Medical Association.

OBITUARY

Charles Eaton Phillips

1877—1945

Charles Eaton Phillips, in practice in Los Angeles from 1914, passed away on Friday, June 15, 1945. A native of Millington, Illinois, and a graduate of the Medical School of the University of Illinois in 1903, Doctor Phillips served in the Panama Canal Zone during the period 1906 to 1913, beginning as an intern in the Ancon Hospital and advancing until he became chief of the surgical clinic in the Colon Hospital. During World War I he was a major in the Medical Corps of the United States Army, being stationed at Camp Dodge in Iowa, and the Walter Reed Hospital in Washington.

In his affiliations in Los Angeles he was prominently identified with the development of the surgical work in the Los Angeles County General Hospital, where for some twenty-four years he was a surgeon on the Senior Surgical Service. He was a member of the attending staffs of practically all the major hospitals in Los Angeles.

A much beloved member of the medical profession, and a strong supporter of scientific and organized medicine, his death brought sorrow to a host of patients, friends and colleagues.

A special committee of the Los Angeles County Medical Association paid tribute to his memory in the following words:

To Doctor Phillips death came merely to deepen the restful sleep of a tired man, "just tired out" by a lifetime of service in the medical profession; eight years as surgeon in Panama when the Canal was built, a quarter century as chief surgeon at the Los Angeles County General Hospital, as writer on medical and allied subjects, as teacher in wards and medical school, as originator and adapter of surgical techniques which made him famous among his colleagues, and above all as a general surgeon practicing his art with skill, understanding and sympathy.

He was universally respected, admired and esteemed

by the medical profession for his keenness of judgment, clarity of thought, and ability to meet difficult surgical emergencies by skillful use of trained hands and a thinking brain; by the general public for his unceasing thought for the well-being of patients in distress and pain.

He hated sham, half-truths and cynicism. In his writing his sharp wit and analytical probing brought revealing light into dark corners. His great surgical knowledge and his ability to talk understandably brought him into law courts many times as an expert, relied on for his honesty and judicial judgment.

Among his colleagues he was loved and respected as few men are.

CALIFORNIA COMMITTEE ON PARTICIPATION OF THE MEDICAL PROFESSION IN THE WAR EFFORT

Anniversary of the Army Medical Department

The Army Medical Department celebrated its 170th anniversary on July 27 of this year with the realization that it had grown into the largest organization of the kind ever known and that it is giving this nation's army the best medical care that soldiers have ever received.

From its inception in 1775 shortly after General George Washington became Commander-in-Chief of the Continental Army until the present day, the Army Medical Department has made steady progress in military medicine; it has made scientific discoveries that have benefited all of mankind; but never has its progress in both of these categories been so rapid as in recent years.

The Honorable Robert P. Patterson, Under Secretary of War, in a tribute to the work being done by the Medical Department under Major General Norman T. Kirk, The Surgeon General, recently said that no army at any time in history has achieved a record of recovery from wounds and freedom from disease comparable to that of the American Army in this war. Mr. Patterson said also that the Medical Department is attaining new records in almost every field of its endeavor. He cited the Army's record of saving nearly 97 of every 100 wounded soldiers who reach Army Hospitals, the disease rate of less than one in one thousand, and similarly startling figures with reference to malaria, the dysenteries, and other diseases, showing that the Medical Department has established effective control on all disease fronts . . .

As an illustration of the remarkable advance of medical science in this war over other wars Major General Norman T. Kirk, The Surgeon General, recently cited the fact that in the Civil War the armies of the Union and Confederacy lost 336,216 men from disease; in World War I, deaths from disease totaled 62,670; but the rate in this war is only .6 of one man per 1,000 men per annum—or 12,000 deaths from disease since the war started.

Major Craighill Reports on Health of Army Women Overseas

Major Margaret Craighill, MC, Consultant to The Surgeon General for Women's Health and Welfare, returned to Washington, D. C., this month from an eight-month inspection trip of WAC and medical installations during which she covered approximately 56,000 miles of the war zones . . .

Major Craighill stated that in general the health of Army women overseas is excellent—even better than that of the men in many places because they have been given

a better break in living conditions. She found that illnesses are more prevalent among the older women and that the younger women are better able to adapt themselves to hardships and inconveniences. For this reason she expressed her personal opinion that women over thirty-five should not be sent overseas unless they were needed for top administrative posts.

There is no need to be concerned about the effect of either cold or tropical climates on American women, she said, although she believes that they should not be left in difficult climates overseas for more than two years.

Major Craighill, who was the first woman to be commissioned in the Army Medical Corps, was formerly dean of Woman's Medical College of Pennsylvania, Pa.

President Truman Signs Bonus Bill for Medical Personnel

President Truman on July 7 signed legislation giving non-combatant Army Medical Corps personnel serving in the front lines the same \$10 a month bonus paid to combat infantrymen.

The War Department previously awarded front-line Medical Corps men a badge similar to that provided expert infantrymen who are entitled to the extra \$10 a month.

"Sulfa" in Wounds Discontinued

The Army's accumulated experience in wound management does not justify the local use of any chemical agent in a wound as an anti-bacterial agent, according to the Office of The Surgeon General. The local use of crystalline sulfonamides (sulfa powder) has therefore been discontinued except in the case of serious cavities where its use, while permissible under the direction of the surgeon, is not recommended. This subject is covered by War Department Circular No. 160 as amended by W.D. Circular No. 176, 1945.

Health of Troops in U.S.A. Is Excellent

During this past winter and spring the health of troops stationed in the United States has been excellent, surpassing that of any previous war year. The low hospital admission rate for all diseases reflects fewer communicable conditions, as it is during this period of the year that infectious diseases usually predominate.

There were less respiratory diseases than in any previous war year, although during May there was a slight rise in these cases. Pneumonia, measles, scarlet fever, meningitis, and rheumatic fever were all less prevalent than during the winter and spring of 1944. The only important infectious diseases of which this was not true were venereal diseases and infectious hepatitis.

Relapses in the United States of malaria infections acquired in tropical areas overseas increased each month until March, 1945, but have since declined slightly. With malaria control in all overseas areas now greatly improved, the number of relapse cases should continue to decrease.

The fact that most of our troops are well seasoned and there are fewer newly inducted troops is responsible in part for this improved health record. Most Army hospital beds here are now occupied by patients evacuated from overseas.

President Truman Told More Doctors Are Needed for Postwar Period

Shortly after conferring with President Truman, a special committee of the Committee on Postwar Medical Service of the American Medical Association sent a

memorandum to the chief executive, pointing to the country's failure to "provide for the training of enough physicians to meet the demands for doctors which we know will increase after the war."

The memorandum, mailed to the President recently and published in full in the July 21 issue of *The Journal of the American Medical Association*, was prepared by four physicians—Evarts Graham, St. Louis; Harvey Stone, Baltimore, and Victor Johnson and Fred C. Zapffe, both of Chicago.

The memorandum said in part:

"Even if admissions, enrollments and graduations from our medical schools should continue at the present wartime levels, only about half of this need would be met, since 40,000 students will receive the M.D. degree in the period 1942 to 1948 and 24,000 physicians will have died during that time. Thus, under the most favorable conditions only about 16,000 additional physicians will be available after the war to do the work of 30,000."

"In spite of this, freshmen enrollments in the medical schools of this country will be drastically reduced within the next year. In the past year virtually no able bodied males have been permitted to commence the two year course of college premedical studies because the Army and Navy have ceased assigning men to such studies and the Selective Service System has discontinued deferments of premedical students. In the past few years each freshman class of about 6,000 students included 4,000 to 5,000 able bodied men. These are no longer available under existing regulations.

"This deficiency can be corrected under the present Selective Service Act as follows: Defer qualified men now in college premedical studies when they reach 18 and defer 8,000 selected high school students of this year to commence college studies in premedicine. From these, 4,500 should be earmarked for admission to specific medical schools a year later. Repetition of this procedure each year the war lasts would effect the training of enough doctors to care for the health of the people. Consideration might also be given to the assignment of a limited number of men now under arms back to premedical studies, provided they pursued such studies satisfactorily before induction, as far as this may be consistent with military necessity."

Army to Free 7,000 Doctors by May, 1946

The Army promised on July 11 to reduce its doctors by 7,000 by May, 1946—a rate of demobilization that was criticized by a Senate subcommittee as too low.

Plans for releasing doctors were disclosed at the committee's hearing on the relative needs of the civilian population and the Army for medical care.

Senator Johnson (D., Colo.) said "the leisurely attitude of the Army toward this problem is something that this committee ought not to accept lying down."

Brigadier General Robert W. Berry, representing the War Department took exception "to the use of the word leisurely," but Johnson reiterated he thought it was "the right word."

"There is a tragic and critical need for these doctors in our communities," put in Senator Downey (D., Calif.), subcommittee chairman.

Testimony brought out that the Army now has about 45,000 doctors and that, including those in the Navy and the Veterans' Administration, the total serving the armed forces is approximately 60,000.

In active civilian practice, by comparison, were roughly 74,000 doctors, although another 20,000 are in salaried jobs with State hospitals and industrial plants, or are serving as interns.

Berry told the committee the Army death rate from

sickness was six-tenths of a man per 1,000 a year, adding this is "the finest record any Army in any war ever attained." With fewer doctors, he said, "deaths would have skyrocketed."—San Francisco *Chronicle*, July 12.

900 Doctors Released by Army, but—

Senator Downey (D., Calif.) on July 18, stated that, while the Army may have released 900 medical officers since January 1, 1945, as it recently announced, it has taken in 1,500 others in that time.

"Thus there are more medical officers on duty now (in the Army) than were in January, 1945, despite the defeat of Germany," Downey asserted.

Downey, chairman of a military affairs subcommittee investigating use of the Army's medical personnel, said in a statement that he had been informed the released officers fall into five categories:

(1) Officers incapacitated for any real work; (2) those dismissed after court-martial; (3) officers permitted to resign in lieu of being reclassified; (4) officers released for personal hardships "in many instances so severe as to prevent the individual from doing much work in private practice"; (5) some 50 to 100 individuals released so that they can minister to civilians.—San Francisco *Chronicle*, July 19.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

The Doctors' Voluntary Health Plan for Nation

Now the physicians of the nation have advanced their own voluntary health insurance plan.

It frankly is an effort to forestall government action for socialization of medicine.

The success of the physicians' own proposals undoubtedly will depend in large measure upon the thoroughness with which they push their program. They must remember that vigor is required. The public must be convinced that voluntary health insurance is better than regimentation.

And it must not be forgotten that socialized medicine is being advocated most vigorously by certain political elements who continually are conducting an all-out campaign for regimentation of this entire nation. These elements will not rest a minute. They have some sincere converts to their belief, but many of them are motivated by selfish aims.

The American Medical Association, therefore, not only must prove that its 14-point program is adequate but also must be on guard against the highly glamorized counter-propositions from political sources. The public easily can be confused on this vital issue and possibly induced to believe that a State or Federal program of medicine would be preferable to a voluntary one.

The A.M.A. rightly adopts the traditional American principle of local initiative in its suggestions for hospitalization and sickness insurance. Its insistence that these insurance plans be of a local nature will assure the type best adapted to each locality. That would be one of the great difficulties in any State or Federal sickness insurance plan—trying to adapt it to crowded cities and sparsely populated rural areas under some inflexible overall plan. We saw the evils of such attempted administration in the days of depression relief under the New Deal.

Many local plans of health insurance already have proved highly successful. They undoubtedly can be improved upon as they are extended and more experience is gained. They will tend to retain the traditional personalized relationship of family doctor and patient.

Another advantage of voluntary local plans is that the people who actually are to benefit share the cost. Under certain governmental plans the taxpayer would be saddled with a burden which would not provide equal benefits. In other words, governmental plans probably would impose upon a member of some private group—who already was protected with health insurance—the same cost as upon his neighbor who had no such protection.

The doctors take note of the indigent problem by recommending local insurance plans in addition to the present county hospital setups and the like.

Now the lines have been drawn.

The Family Physician vs. the Government Doctor.

In the final analysis the public must make its choice.—Editorial in *Los Angeles Times*, July 28.

Health Insurance Problems in U. S. Given Scientific Study

Research Men Report Lack of Specific Information to Determine Exact Need For Medical Care

Compulsory health insurance with all its broad ramifications is reviewed in the July 21 issue of *The Journal of the American Medical Association* which says, editorially, that it "is offered as a report of a scientific investigation into the forces now promoting the mechanism for medical service incorporated in the Wagner-Murray-Dingell bill."

The Journal's article, prepared by Carl W. Strow and Gerhard Hirschfeld, Research Consultant and Director, respectively, of the Research Council for Economic Security, sheds light on various national health problems in order that a better view might be obtained on the subject of compulsory health insurance. . . .

Strow and Hirschfeld emphasize in *The Journal* article the need for careful deliberation, both by the government and various states, with regard to current or contemplated proposals for compulsory health insurance. . . .

The authors state that during the legislative sessions of 1945, more than thirty measures proposing cash sickness benefit plans or compulsory health insurance systems were introduced in 12 state legislatures. Other bills called for studies of health insurance, and in Congress a number of bills were introduced providing for some sort of medical care or sickness benefits.

"The demand for compulsory health insurance," the authors said, "has been more consistent and more pronounced in some states than in others. New York, for instance, has had no fewer than 27 health insurance bills introduced in the legislature between 1935 and 1945. Yet New York has far better medical and hospital facilities, as well as provision for social services, than the average state. On the other hand, such states as Mississippi, Georgia, Alabama, Arkansas and the Carolinas, where the need for medical care is most acute, have practically no organized demand for compulsory health insurance."

"Since 1935 and including 1945," *The Journal* article said, "102 bills have been introduced into the legislatures of 20 states, with success only in Rhode Island, in 1942. The passage of the National Social Security Act in 1935 was largely responsible for the increased activity."

The two research men said it was difficult to form an exact conclusion on what the public thinks of the problem of health insurance.

"Public opinion polls would indicate that the public favors health insurance," they said, but added cautiously: "However, this depends on the form in which the question is submitted. If it emphasizes benefits, public opinion favors health insurance. But when the question emphasizes the financial cost, the necessary tax burden and the economic consequence in general, the public seems to be less sure about the desirability of a compulsory system."

"Notwithstanding the large amount of voluntary protection against illness, there is no disagreement among the advocates of compulsory health insurance, as well as the opponents, as to the need for better medical care. The disagreement is about the form, the administration, coverage, benefits and many other details. . . .

"The health problem differs in virtually every state. In California, communicable diseases account for a major share of reported illnesses. In Mississippi influenza, syphilis, malaria, gonorrhea and dysentery are high on the list of reported illnesses. In New York cancer, syphilis, tuberculosis and pneumonia are the important health problems. . . .

In conclusion, the researchers said:

"The demand for compulsory health insurance is promoted most powerfully by organized collective action, especially by organized labor. . . . Apparently, the opportunity to organize the demand is more important than the prevalence of the need for medical care. The evidence points to the probability that, contrary to popular belief, the legislative proposals for compulsory health insurance are based not so much on social needs as on political interests, and that the ability on the part of labor to organize and press the demand, rather than the concern about the state of health, is the primary consideration. . . .

"Illness apparently is not chiefly responsible for the demand for compulsory health insurance. If it were, recommendations would start in the medically least progressive states. However, they originate at the opposite end of the scale, where medical care and social services are most highly developed."

Proposed Health Bill by Kaiser

Voluntary Plan Would Operate Through FHA

Henry Kaiser has prepared a bill for introduction in Congress by Senator Claude Pepper (D., Fla.), that would permit establishment of voluntary systems for prepaid medical care throughout the country through the facilities of the Federal Housing Agency.

This was disclosed to the San Francisco Chronicle on July 18 with the information that the measure is about to be introduced as an amendment to the National Housing Act.

The bill is an outgrowth of Kaiser's experience in providing group health insurance to 125,000 employees monthly through the Kaiser Permanente Foundation.

Talk With Senators

Kaiser recently conferred with Senators Pepper, Murray (D., Mont.), Hill (D., Ala.) and Taft (R., Ohio) at an executive subcommittee session, he revealed after Chronicle inquiry, and "their questions indicated they had no serious objections to the plan."

The measure provides:

1. Guaranteed local bank loans to groups interested in setting up facilities for prepaid medical care.

(Under this provision a group of physicians, or a non-profit organization limited to labor, management and labor-management groups, or states and political subdivisions, could obtain a 90 per cent loan on a hospital property for group medicine.)

2. Technical assistance to the F.H.A. by the U. S. Public Health Service in determining the need and likelihood of success of the individual project.

3. Limitations upon the F.H.A. administrator, barring him from exercising any supervision or control over the administration, personnel or operation of the facilities except where specifically provided by law.

4. Preference for utilizing existing private or public facilities, and preference—in case two applicants seek to establish a medical facility in the same area—of the more complete plan.

Typical Case

As explained by Kaiser, a typical case might be as follows:

"Suppose ten service doctors who had learned to work together wanted to continue their work in private life. Each of them might have \$2500—they could borrow that much under veterans legislation.

"They pool their \$25,000 and use it as the down payment on a guaranteed loan on a hospital property, say a 60-bed hospital capable of serving a population of 10,000. They give the F.H.A. a 4½ per cent mortgage on the hospital property.

"Then they go, for example, to ten manufacturers or merchants employing a thousand people each. These employers agree to deduct 10 cents a day from the pay check of employees who subscribe to the plan.

"Ten cents a day from 10,000 subscribers is a thousand dollars a day income, or \$365,000 a year. This should supply the doctors' and nurses' salaries and amortize the loan. It would provide voluntary health insurance for the 10,000 people.

"The F.H.A. has had a very successful experience in insuring home loans, why not for the purpose of providing health homes?" he asked.

Deadly Serious

Kaiser said he was "deadly serious" in an effort to provide a public health measure that not only would encourage maximum initiative on the part of the medical profession but would also limit to a minimum any interference by Government agencies.

"The practice of preventive medicine is assured by providing the doctors with a regular income which compensates them for keeping their subscribers healthy rather than for treatment of illness," he wrote Senator Pepper.

"The prepaid medical plans made possible under the bill will operate as business enterprises, motivated by the impelling force of competition.

"This is not socialized medicine in the sense of a social experiment," he added. "The medical service rendered by the Permanente Foundation is fully equipped with the facilities required by the science of medicine and is wholly self-supporting and self-amortizing. This bill is a projection of that experience."

Kaiser said that since the bill provides a method for stabilizing and rationalizing the economics of medical practice, within the system of free private enterprise, he felt it should not meet objection from the medical profession.

He said he believed such a measure was necessary to provide group practice, with its various specialized forms, at low, regular cost to the subscribers. He cited that "prepayment relieves subscribers from financial inhibitions and encourages them to consult their doctors early and often."—Fred Duerr, in San Francisco *Chronicle*, July 19.

Governor Warren Signs Clinic Site Bill

First step in what is expected to develop into an important psychiatric institution in Los Angeles was taken on July 19, according to Dr. George Thompson, chief psychiatrist of General Hospital, when Gov. Warren in Sacramento signed a bill appropriating \$100,000 to buy a site for a psychiatric clinic.

The clinic will be patterned after the Langley Porter Clinic established by the State three years ago in San Francisco.

There is no way to estimate the cost of the building and equipment but it probably will be in the neighborhood of \$500,000.

The clinic will be devoted to research, teaching and treatment.

COMMITTEE ON HOSPITALS, DISPENSARIES AND CLINICS

San Francisco Group Plans Institution for Chronic Sick

San Francisco will have an institution for the care and treatment of the chronic sick, the first of its kind in this region, if present plans of the Federation of Jewish Charities here materialize.

The project is the outgrowth of studies indicating that sufferers from paralysis, arthritis, diabetes, heart disease and other ailments, lack adequate medical attention here, because of a shortage of specialized facilities in the community.

Under present plans, patients would receive all benefits of modern medical therapy for as long as necessary. The institution would serve free, part pay and full pay cases.

Conceived as a separate entity under the Federation of Jewish Charities, nevertheless it is expected that the Mt. Zion Hospital staff will furnish required medical care. . . . —San Francisco *Chronicle*, July 16.

Los Angeles Blue Cross Plan

At least two and a half million Blue Cross members will receive more complete prepaid hospital care as the result of recent sweeping contract changes by nine Blue Cross plans. . . .

Two geographically-opposite plans also recently revised their contracts to include more complete subscriber services—Wilkes-Barre, Pa., for the eleventh time in less than seven years and Los Angeles, Calif., for the third time in three years. . . .

Third for Los Angeles

The third liberalization of benefits by the Blue Cross plan in Los Angeles means an extra 180 days of hospital care at 50 per cent discount in addition to the 21 provided annually for each illness or injury of separate cause. The first increase in subscriber benefits by this plan occurred about three years ago when all waiting periods for needed services were discontinued, and conditions existing at the time of joining were immediately covered for hospital service. The second liberalization came a year and half ago when the plan announced the inclusion of maternity benefits in all family contracts.—“Blue Cross Bulletin,” Vol. VIII, No. 6, June-July, 1945.

Every Two Seconds a Patient Admitted to Hospitals

Americans entered hospitals as patients at the rate of one person about every two seconds last year, not counting the babies who were born in hospitals at the rate of one live baby every 16.4 seconds, the American Medical Association's 24th annual hospital census shows.

The 16,063,848 admissions to hospitals, exclusive of outpatients and newborn infants, is called “unprecedented” by Dr. F. H. Arestad and Dr. M. G. Westmoreland, in their report of the facts and figures on hospitals.

About one-fourth of these admissions, 4,287,271, were to federal hospitals and 2,257,949 to other governmental institutions.

The number of registered hospitals decreased to 6,611, which is 44 less than for 1943, but the number of beds increased to a total of 1,729,945.

In contrast to the feeling some patients may have had that they were being hustled out of the hospital pretty fast after an operation or the birth of a baby, to make room for the next patient, is the figure showing that in general hospitals the average length of stay per patient increased by one-half day.

Of the 1,919,976 babies born in hospitals last year, 96.7 per cent were born in general hospitals, with only 3.2 per cent born in maternity hospitals and 0.1 per cent in other institutions. The number of babies born in hospitals has more than tripled in the past 15 years.—San Francisco *News Letter*, May.

Adult Respirators in California

Publication No. 24-C of The National Foundation for Infantile Paralysis, Inc., 120 Broadway, New York 5, N. Y., on “Respirators, Locations and Owners” was recently issued.

“The list of adult cabinet type respirators or ‘Iron Lungs’ has been compiled from records available May 1, 1945. It contains only those respirators which have been approved by the Council on Physical Medicine of the American Medical Association. The list is not complete for it does not give consideration to transfer and resale of machines, nor have all that are worn out been removed. These standard cabinet type respirators are not to be confused with other machines such as chest type respirators, resuscitators, inhalators or aspirators.”

California is second in the States in the Union with number of standard respirators, the list in the five states having the largest number being as follows: New York, 159; California, 86; Pennsylvania, 81; Illinois, 59; Texas, 55.

The location list for California follows. Unless otherwise indicated, there is one (1) respirator. Counties follow names of cities, in parenthesis.

CALIFORNIA

Arlington (Riverside)	Riverside County Hospital
Auburn (Placer)	DeWitt General Hospital (Owned by U. S. Army)
Bakersfield (Kern)	Kern County General Hospital(3)
Berkeley (Alameda)	Berkeley Hospital
Carmel (Monterey)	Peninsula Community Hospital
Chico (Butte)	Fire Department
Daly City (San Mateo)	Villa Hospital
El Centro (Imperial)	Imperial County Farm and Hospital
Eureka (Humboldt)	Humboldt County Hospital
Fresno (Fresno)	General Hospital of Fresno County(2)
Hanford (Kings)	Kings County Hospital
Hollister (San Benito)	Hollister City Hall
Lompoc	
(Santa Barbara)	Camp Cooke (Owned by U. S. Army)
Long Beach	
(Los Angeles)	Seaside Memorial Hospital
Los Angeles	
(Los Angeles)	Children's Hospital Hospital of Good Samaritan Los Angeles County General Hospital(7) (2 owned by Los Angeles County Chapter of the National Foundation)
Martinez	
(Contra Costa)	Contra Costa County Hospital
Marysville (Yuba)	Camp Beale (Owned by U. S. Army)
Modesto (Stanislaus)	Hammond General Hospital (Owned by U. S. Army)
Monterey (Monterey)	Fort Ord (Owned by U. S. Army) Monterey Hospital
Oakland (Alameda)	Alameda County Hospital ..(2) Children's Hospital of the East Bay

Orange (<i>Orange</i>)	Orange County Hospital
Palo Alto (<i>Santa Clara</i>).....	Palo Alto Hospital
Pasadena (<i>Los Angeles</i>).....	Collis P. & Howard Huntington Memorial Hospital
	Pasadena Regional Hospital (Owned by U. S. Army)
Redding (<i>Shasta</i>)	Shasta County Hospital
Richmond (<i>Contra Costa</i>).....	Permanente Field Hospital
Sacramento (<i>Sacramento</i>)	Sacramento County Hospital Sutter General Hospital
Salinas (<i>Monterey</i>).....	Monterey County Hospital
San Bernardino (<i>San Bernardino</i>)	The Argonauts Breakfast Club
San Diego (<i>San Diego</i>) .	Mercy Hospital
	San Diego County General Hospital(3) (1 owned by San Diego County Chapter of the National Foundation)
	United States Naval Hospital(2)
San Francisco (<i>San Francisco</i>)	Children's Hospital(5) French Hospital Harbor Emergency Hospital Isolation Hospital Letterman General Hospital (Owned by U. S. Army) Mission Emergency Hospital Mount Zion Hospital Park Emergency Hospital San Francisco Hospital....(6) Stanford University Hospital(2) (1 owned by San Francisco County Chapter of the National Foundation) University of California Hospital(2)
San Jose (<i>Santa Clara</i>) ..	Santa Clara County Hospital(2)
San Mateo (<i>San Mateo</i>) .	Mills Memorial Hospital San Mateo Community Hospital
San Miguel (<i>San Luis Obispo</i>)....	Camp Roberts (Owned by U. S. Army)
Santa Barbara (<i>Santa Barbara</i>).....	Hoff General Hospital St. Francis Hospital
Santa Cruz (<i>Santa Cruz</i>).....	Mrs. W. N. Swazey
Santa Rosa (<i>Sonoma</i>) ..	Sonoma County Hospital... (2)
Stockton (<i>San Joaquin</i>) .	San Joaquin County Hospital
Tulare (<i>Tulare</i>).....	Tulare County General Hospital
Vallejo (<i>Solano</i>).....	Vallejo Community Hospital
West Oakland (<i>Alameda</i>)	Permanente Foundation Hospital

Northwest Leads in Medical Insurance

The leading position of Washington and Oregon medical societies in prepayment plans for medical care was studied firsthand by the executive secretary of the American College of Radiology at a regional conference of the A.M.A. Council on Medical Service and Public Relations in Portland, April 7, 1945.

The secretary stated, in the Northwest, medical societies and hospital groups have controversies similar to those in other sections of the country. But there the typical situation is reversed. Medical societies preceded hospitals in providing group hospitalization and medical service plans. They are now objecting to efforts by Blue Cross to move in.

The Kings County Medical Service Bureau, Seattle, has built its own hospital to provide hospitalization for the subscribers to its medical care plan. The Klamath Medical Service Bureau, Oregon, has done the same.

Doctors controlling the county society medical service bureaus in Washington and Oregon see no reason why they should surrender control of prepaid medical care to Blue Cross, so long as their present plans are adequately fulfilling local needs. With 14.2 per cent of its population covered by medical care insurance, Oregon leads all other states in percentage of population enrolled. Washington is second with 12.9 per cent covered.

Officers of Oregon Physicians Service charged that, "Despite denials to the contrary by Blue Cross authorities, there had been several definite instances of attempts made by hospital organizations or their representatives to intimidate, dominate, or control the medical profession or to subordinate the profession to hospitals or health centers."

Five-Million-Dollar Expansion Planned for Letterman

Letterman Hospital of San Francisco to Be Nation's Biggest Debarkation Unit

A \$5,000,000 expansion program for Letterman Hospital which will make it the largest debarkation hospital in the country was announced on July 27, by Brigadier General Charles C. Hillman, commanding officer of the hospital.

Headquarters of the Western Defense Command, now skirting the parade grounds, will be moved to Fort Winfield Scott.

The expansion program is expected to be completed within six months.

The Letterman Hospital reservation then will have 8,500 beds as compared with 3,100 at present.

Patients debarking from Pacific transports—both ships and planes—will stay at Letterman from five to six days before being transferred by train to hospitals nearest their homes—an average journey of 2,300 miles.

Twenty thousand patients can be handled monthly when the expansion is completed.

Fifty stucco buildings, containing 36 wards, two recreation centers, a theater, a chapel, a heating plant, and administration building, will be constructed along the bay on the old Crissey Field site.

All buildings will be connected by a central ramp.

A fishing pier will be built into the Bay for patients' use.

General Hillman said there would be a proportionate expansion of the hospital train unit.

There are now four tracks laid on Crissey Field to accommodate hospital trains. These will be connected with all parts of the hospital by covered ramp so patients may be wheeled from their beds directly to the train, eliminating the present ambulance trip.

In addition, a heavy shop for repair of hospital cars will be constructed at the far western end of the field.

Personnel of the hospital train unit will be increased to 3,000. Six thousand persons will be needed to operate the enlarged facilities. Fourteen hundred additional civilians will be required.

At present there are 1,200 enlisted men and 900 civilians employed. After expansion 3,000 soldiers and 2,000 civilians will be needed. The Letterman compound will house a total of 15,000—operating personnel and patients.

Dante Hospital at Van Ness Avenue and Broadway, now a Letterman annex, will be used solely for local admissions. The present Letterman Hospital will treat surgical and psycho-neurotic cases and the Crissey Field addition will handle all other cases.

Two large concrete buildings, now used as Western Defense Command headquarters, will be devoted to hospital beds. The brick buildings along the parade ground will be used as barracks for military personnel connected with the hospital. Increased number of casualties demand the expansion, General Hillman explained.*

In the first half of last year, he said, casualties from all theaters of war totaled only 9,000 a month. In May of this year alone, 57,000 wounded and ill men were debarked from fighting fronts—9,100 at San Francisco.

Permanente Hospital in Oakland is Opened to Public Prepaid Medicine

Henry J. Kaiser's Permanente Foundation Hospital in Oakland, built to provide prepaid medical care for 100,000 shipyard workers, has been opened to the public.

Clyde F. Diddle, administrator of the \$2,000,000 hospital at Broadway and MacArthur Boulevard, said on July 20, that any individual may walk into the hospital and apply for complete, prepaid medical care.

Groups of 25 workers under one employer may also obtain medical service. The 300-bed hospital has 80 full-time physicians and surgeons, laboratories, clinics and pharmacies.

Four-Point Plan

The Permanente Foundation, with hospitals at Oakland, Richmond, Fontana and Vancouver, operates under principles involving four points, Diddle said.

These are: pre-payment, group practice, adequate facilities, and "a new medical economy."

This "new economy," strongly opposed in part by some factions favoring the traditional family physician-patient relationship, follows the old Chinese practice of paying the physician while you are well.

"We offer medical service from nasal spray to surgery—and all under one roof," said Diddle. "The important thing is that there are no barriers to early treatment.

"There is a tendency, because of the cost of medical care, to let things go—to visit the doctor as little as possible and only when you are in desperate need.

"Those who believe in the new economy emphasize preventive medicine. Under the Foundation plan, patients are encouraged to come in early to shorten the treatment."

Diddle said the hospital, now released from the pressure of meeting the medical needs of some 50,000 shipyard workers who have left the yards in the past six months, has become the only hospital in the nation handling industrial accident cases on a contractual basis.

Prepaid Care

Under this contractual system, the hospital receives a percentage of accident insurance premiums and provides, in return, care for the insurance company's clients' injured workers. It is another form of prepaid medical care.

"In another way, we are trying to continue the type of medical care Army and Navy men learned to expect in four years of war—the opportunity to drop in at a well-equipped, well-staffed hospital and receive treatment for anything from a scratched finger to a serious illness," Diddle explained.

It was disclosed on July 19 that Henry Kaiser was preparing a bill for introduction in Congress to permit establishment of voluntary systems for prepaid medical

* With unconditional surrender of Japan, new building plans for Letterman will be held in abeyance.

care throughout the country through the facilities of the Federal Housing Agency.

Diddle said that a 60-bed infirmary, named the Permanente Medical Center, was recently opened at Vallejo as an extension of the foundation's medical services.—San Francisco *Chronicle*, July 21.

Kaiser Widens Medical Plan

Permanente System Extended in Vallejo

Permanente Foundation, the Henry Kaiser prepaid medical plan, has been expanded to include a large group of persons not on company payrolls, with the extension of services to eight Vallejo area housing projects, it was revealed today.

The new medical center will be established in the wing of the present public health service infirmary. It will be open from 10 a.m. to 10 p.m., with service available at night on call.

A physician will be assigned to each dormitory.

This medical center has a potential membership of 25,000, according to company estimates.

The health plan expansion marks the beginning of efforts under way by the Kaiser organization to offer Permanente Foundation facilities to all groups interested in prepaid medicine.

A million and a half dollar addition made to the Permanente Hospital, Broadway and MacArthur Boulevard, Oakland, made the present extension possible, the company announced.—San Francisco *News*, July 17.

Kaiser on Prepaid Medical Care

Henry J. Kaiser on July 20 called on San Francisco business leaders to approach reconversion in a spirit of boldness "uninfluenced by the rumors of depression, deflation, disorder or revolution."

He spoke to a Chamber of Commerce luncheon on "Post-War in Prospect," asserting that the West is in the van of great industrial development, that San Francisco faces the same challenge in peace that it did in 1906 after the fire. . . .

On the subject of prepaid medical care, he asked "Why can't we lead the way in providing the best in medical facilities to be within reach of all?"

"Just across the bay we have a laboratory, or shall I say a model, which has been studied by medical authorities and public health officials from all over the nation and from a number of foreign countries.

"The confidence and commendation which has been expressed give us the faith to believe that this is a good idea. If only we could have at least one prepaid medical health center in every Western community, we could be assured that there really is to be a new world in which this priceless service becomes a right rather than a privilege." . . . —San Francisco *Chronicle*, July 20.

Hospitalization of Communicable Diseases

Los Angeles City—July, 1945

(COPY)

**DEPARTMENT OF HEALTH
CITY OF LOS ANGELES**

In accordance with Municipal Code of the City of Los Angeles (Sec. 32.12) which reads as follows:

"... Before such isolation ward may be installed, operated or maintained, an application in writing therefor shall be made to the Board of Health and the approval by the Board of the installation, operation and maintenance of such isolation ward shall be first obtained. Such isolation ward shall be used exclusively for the

isolation, care and treatment of persons affected with such communicable or contagious diseases. Such isolation ward shall, at all times, be operated and maintained in conformity with the rules and regulations of the Board."

1. Because of their communicability, none of the following diseases may be cared for in any hospital, sanitarium, or other common place of care of persons except the Los Angeles County General Hospital which has been duly authorized, or in other contagious disease units which may be authorized in the future:

Chickenpox	Pertussis
Cholera	Plague
Diphtheria (cases and carriers)	Pollomyelitis
German Measles	Psittacosis
Leprosy	Rabies
Leptospirosis (Weil's Disease)	Typhus (Epidemic)
Measles	Smallpox
Meningococcal Meningitis	Scarlet Fever
Mumps	Tuberculosis
Paratyphoid Fever	(Infectious Stage)*
	Typhoid Fever
	Typhoid Carriers

* Various institutions have been especially licensed to care for tuberculosis.

Note: Nothing herein is to be construed as demanding that any person with a communicable disease must go to the hospital. When hospitalization is necessary, however, only the Los Angeles County General Hospital is allowed to accept or keep such a patient. Any person infected with a communicable disease may remain at home, except in instances, when in the opinion of the Health Department, home conditions prevent isolation of the patient within the home.

2. Certain diseases because of their relative mildness or low communicability with the ordinary type of contact in institutions do not come under this classification, and therefore may be cared for in institutions using reasonable care to prevent their spread. These include:

Actinomycosis	Malaria
Ascariasis	Mononucleosis (Infectious)
Chancroid	Pediculosis
Choriomeningitis	Pneumonia
Coccidiomycosis	a. Pneumococcal
Dengue	b. Other Bacteria
Dysentery (Amoebic) (Bacillary)	c. Primary Atypical
Encephalitis	Relapsing Fever
Filariasis	Rheumatic Fever
Food Infections (Salmonella)	Typhus (Endemic)
Food Poisoning a. Staphylococcus b. Botulism	Ringworm
Gonorrhea	Scabies
Hookworm Disease	Streptococcal Infections
Infectious Hepatitis (Catarrhal Jaundice)	a. Erysipelas
Impetigo	b. Puerperal Infections
Influenza	Syphilis
Lymphogranuloma	Tetanus
Venerum (Inguinal)	Trachoma
	Trichomoniasis
	Tuberculosis
	(Non-infectious)
	Tularemia
	Undulant Fever

3. All institutional outbreaks including epidemic diarrhea of the newborn and impetigo must be reported to the Health Department immediately and will be handled according to the demands of the situation.

4. Exceptions to this policy must be authorized by the Health Department. For example, in exceptional cases where the movement of a patient with an acute communicable disease will jeopardize his life, the Health Department may authorize, temporarily, that he not be moved.

The above rules were adopted by the Board of Health Commissioners June 7, 1945, on recommendation of the Medical Committee of the Board.

17,500,000 Americans Now Members of Blue Cross

One out of every seven Americans, as of April 1, 1945, is paying his hospital bills in advance through non-profit

Blue Cross plans serving 42 states, the District of Columbia, 7 Canadian provinces, and Puerto Rico. The 17,500,000 membership mark was passed as this year's first quarter growth of 1,000,000 persons broke all previous records.

Daily, 12,000 workers and family members, or 85,000 weekly, are adding their names to Blue Cross plan membership rolls as voluntarily-assumed protection against the unpredictable, and therefore burdensome, costs of hospitalized illness and injury. Coöoperating are 350,000 employers who are either allowing payroll deduction or else paying part or all of the cost for employees.

The membership goal set for the close of this year by the 84 American Hospital Association approved Blue Cross plans across the nation is 21,000,000 persons, or a gain of 4½ million members during 1945. This gain would exceed by 1,000,000 the record growth of 1944.

Three Plans Over One Million

Three Blue Cross plans report memberships of more than 1,000,000 persons: New York City, 1,950,000; Michigan, 1,243,950; and Massachusetts, 1,060,970. Eight additional plans report membership of more than 500,000 persons: Cleveland, 834,850; Chicago, 766,900; Pittsburgh, 753,700; Philadelphia, 722,000; New Jersey, 711,450; Minnesota, 617,200; St. Louis, 505,350; and Cincinnati, 501,960.

Only six states, containing but 5 per cent of the population of the United States, are now without hospital-sponsored Blue Cross plans. The four state-wide plans formed during the past year—Florida, Indiana, Utah, and Arizona—are spreading out rapidly to make protection available to the residents of these states.

How They Join

Family dependents continue to exceed breadwinners in percentage of Blue Cross membership (54.8 and 45.2). Workers join for themselves and their families through their place of employment: industrial plants, factories, stores, offices, private and public institutions, professional groups, and farm and community organizations.

Twenty-nine Blue Cross plans now accept as members individuals who are self-employed, domestics, unemployed, or retired.

More than 425,000 hospital bills were paid by Blue Cross plans during the first three months of this year, the costs of which exceed \$22,250,000. The daily admission rate for Blue Cross patients totaled more than 5,000. —"Blue Cross Protection," Vol. 2, No. 1, Spring, 1945.

Commission on Hospital Care

A Non-Government Public Service Committee to Study Hospital Service in the United States

America's First Hospital Inventory—1945.—For the first time in our history a complete inventory of our nation's hospitals is being taken. This inventory is part of a broad hospital study under the direction of the Commissioner on Hospital Care, 22 East Division Street, Chicago 10, Illinois.

Besides taking inventory of the 1945 hospital, the Commission on Hospital Care is analyzing economic, geographic and population factors—all of which have a direct bearing on postwar hospital construction and the future quantity and quality of hospital service throughout the country.

The Commission on Hospital Care—What It Is.—The Commission on Hospital Care is not an official public enterprise. It is not a private organization. It is neither—yet it is both.

The study is being conducted as a coöperative effort of government and voluntary hospital interests to discover the facts about the nation's hospitals.

The Commission was inaugurated by the American Hospital Association, is financed by funds from private resources and is sponsored by state and regional hospital organizations.

It is assisted in its work by the United States Public Health Service which has made technical personnel and physical facilities available to the staff. Also, state health departments have offered assistance and in some instances are actually conducting the studies.

The Commission on Hospital Care—How and Why It Began.—The unplanned growth and haphazard distribution of hospitals throughout the country is a situation which hospital people have been considering for a long time. Members of the American Hospital Association believed that complete inventory of all establishments offering bed care for the sick was basic to the planning and development of a coördinated hospital system.

They inaugurated a new organization, the Commission on Hospital Care. It is broadly representative of professional and public groups. It operates independently of any single organization. The Commission on Hospital Care is completely free from opinion and prejudice and is able to do the fact-finding job on a truly impartial basis.

Its members and its technical staff approach the problem with no preconceived plan. They are united and guided by a sincere interest in finding the facts. The study is financed by the W. K. Kellogg Foundation, The Commonwealth Fund, and The National Foundation for Infantile Paralysis.

The Hospital—“Doctors’ Workshop.”—A century ago the hospital was a dreary shelter for the destitute. Today it is the brisk, shining center of all society’s life-giving and life-saving activities.

It was the lightning development of medical science that rocketed the hospital into this new position. Medicine’s newer methods required the use of complicated machinery, expensive pilot study.

The Director of Study is A. C. Bachmeyer, M.D., and associated with him are Maurice J. Norby, Director of Research; Robert C. Morrey, M.D., Assistant Director, Surgeon (R) United States Public Health Service, and C. Horace Hamilton, Ph.D., Director of Sociological Research.

The roster of some 21 members of the Commission includes the names of two Californians:

Wilton L. Halverson, M.D., Sacramento; Director of Public Health, State of California; and

Herbert Hoover, Stanford University, California; Trustee, Stanford University [Stanford University Hospital].

“Blue Cross and the National Scene”*

The Blue Cross Plans for protection against the costs of hospitalized illness have enrolled more people in less time than any voluntary program in the history of the world.

This movement began as a cautious experiment in the law of averages. Ten years ago there were approximately 100,000 Americans budgeting their hospital bills through voluntary, non-profit prepayment plans which offered free choice of institutions. At the present time 18,000,000 persons—nearly one-seventh of our civilian population—are covered by Blue Cross Plans in 43 states and seven provinces.

Blue Cross protection is available in 3,500 member hospitals which constitute 85 per cent of the bed capacity

open to the general public for acute illnesses. The movement is sponsored by 1,500 civic leaders from industry, labor, welfare, hospitals and the medical profession. These trustees serve without pay; their only reward is the satisfaction of performing a public service through which Americans can place hospital care in the family budget along with other necessities.

From Experiment to Example

Blue Cross has now moved from the area of cautious experiment to the field of courageous leadership. Public acceptance has grown rapidly. In addition to the 18,000,000 members of Blue Cross Plans, an additional 8 or 10,000,000 receive more or less complete protection through industrial medical service and stock or mutual group insurance policies.

There are now 23 Blue Cross Plans coördinated with non-profit, medically sponsored prepayment programs for physicians’ services. The number of such plans is increasing each month, and enrollment may ultimately reach the number of subscribers in hospital plans.

The coördination of medical plans with Blue Cross is consistent with the public’s desire for protection against the full costs of hospitalized illness and with the elementary fact that medical attention and hospital care are interdependent factors in the diagnosis and treatment of illness.

The policies and methods of coöperation are in a formative stage, with different degree of administrative unity, which vary from completely identical to entirely separate corporations and personnel. The ultimate validity of any specific methods of coöordination must be tested by public acceptance, quality of service, and the freedom of action and choice provided to physicians, institutions and patients. . . .

Factors in Blue Cross Success

The Blue Cross method of furnishing health service is a product of two basic factors: *first*, the individual’s “quest for certainty” in preserving and restoring his personal health; *second*, the community’s recognition that sickness and accident are unpredictable by the individual, and hence require group action if health service is to be adequately distributed.

Health and hospital services are not a private commodity, whether considered from the point of view of available facilities, the general attitude of the public, or the history of the provision of hospital service.

The hospitals represent approximately \$4,000,000,000 of capital investment. They have been constructed predominately from public funds, 95 per cent through voluntary philanthropic gifts or governmental taxes by local, state or national bodies. Adequate “stand-by” facilities are necessary to meet unpredictable health needs; hence entire communities have taken the leadership in providing them. Less than 5 per cent of the total hospital capital (2 per cent on the Atlantic Seaboard) has been provided by private investors who expected a return of, or interest on, their original investment. . . .

The public welfare demands that every individual be restored to reasonably good health as soon as possible. This basic factor underlay the practice of the sliding scale of fees when individual practitioners were the main source of medical knowledge and service; and it underlies the present custom throughout the world of permitting the entire population (with varying degrees of equity) full access to the publicly provided buildings, equipment and scientific apparatus in each community.

The Approval Program

Twelve years ago the American Hospital Association recognized the value of the insurance principle for lightening the burdens of patients and stabilizing the income of hospitals. It is not the size, but the uncertainty, of

* Excerpts from a paper by C. Rufus Rorem, Ph.D., C.P.A., Director Hospital Service Plan Commission, Chicago, Illinois, and presented at the Blue Cross Regional Conference, June 14-15, 1945, Philadelphia.

the hospital bill which makes it so burdensome for the person needing care. The uncertainty which makes it hard for the patient to pay his hospital bill also makes it difficult for hospital administrators and trustees to pay the bills of the institutions. Hospitals do not give service in order to get money; but they do need money in order to give service. The only question is: who shall pay the cost of hospital care and under what circumstances shall they do so?

The Association's approval of the insurance principle has been implemented by encouragement of hospitals to coöperate with prepayment plans; also guidance for community leaders in developing such plans by which the people could pay *their own hospital bills, with their own money, in their own institutions.*

A set of standards has been developed by the American Hospital Association which should characterize community-sponsored movements if the hospitals are to be urged to participate in them. These standards cover such points as non-profit organization, free choice of institution and doctor, reasonable charges to the public, adequate reimbursement of the hospitals, effective administration and control. Plans which meet these standards are permitted to identify themselves by a Blue Cross with the seal of the American Hospital Association superimposed upon it. Hence the name "Blue Cross Plan." The Blue Cross symbol was originated by Mr. E. A. van Steenwyk of Philadelphia, when he was administrator of the Minnesota Blue Cross Plan.

The Present Proposals and Prospects

Blue Cross success in reaching 18,000,000 Americans has brought a challenge to achieve protection for a much larger number of the employed population. At present eleven states have already enrolled 20 per cent or more of their total population. These include New York, New Jersey, Pennsylvania, Rhode Island, Delaware, District of Columbia, Connecticut, Ohio, Michigan, Minnesota and Colorado. In some metropolitan areas 50 to 65 per cent of the total population are enrolled under Blue Cross. There is need and opportunity for community leaders and the general population everywhere to do as well for themselves as other parts of our nation. . . .

COMMITTEE ON POSTGRADUATE ACTIVITIES

Public Health School on Berkeley Campus of U.C.

A graduate program will be inaugurated this fall in the school of public health on the Berkeley campus of the University of California under the direction of Dr. Walter H. Brown, acting dean.

A course in health education, leading to the degree of master of public health, will open the program. As the school develops, Dr. Brown says, it is planned to add graduate curricula in public health administration, epidemiology, sanitation, industrial hygiene, biostatistics, and public health laboratory.

"Since health education is one of the most rapidly expanding fields of public health and since the demand for competent persons to make the individual and the community intelligently aware of health problems is one of the most important public health needs, the University's school of public health is offering a graduate course in this field," Dr. Brown said.

Health educators work as regular members of health departments, or may be employed by schools or voluntary health agencies, the dean explained. Heading the new program on the Berkeley campus will be Dr. Clare E. Turner, visiting professor of public health education.

The course will be given in coöperation with the school of education as persons thoroughly prepared in a diverse group of sciences and arts are required. Instructors will be drawn from the schools of education, public health and medicine.

Wartime Graduate Medical Meetings

Note.—The C.M.A. Postgraduate Committee presents below the roster of speakers and topics of "Wartime Graduate Medical Meetings." These listings may have suggestive value to program committees of Component County Societies.

CLINICS, DEMONSTRATIONS, LECTURES

Under the Auspices of the American Medical Association, the American College of Physicians, the American College of Surgeons

Authorized by the Surgeons General,
Norman T. Kirk, Ross T. McIntire, Thomas Parran

Committee 24th Zone

Lt. Comdr. Geo. C. Griffith (MC), USNR, Chairman
U. S. Naval Hospital, Corona
Capt. Harry P. Schenck (MC), USNR
Wayland A. Morrison, M.D.
James F. Churchill, M.D.

Program of the Wartime Graduate Medical meetings for Zone 24 (Southern California) follow:

Birmingham General Hospital, Van Nuys, Calif.—3:00 p.m.

Aug. 8—"The Management of Simple Skin Diseases."—Lt. Col. Everett R. Seale.

Aug. 22—"Anesthesia in War Surgery."—Lieut. L. E. Trotter.

Camp Haan, A.S.F. Regional Hospital—3:30 p.m.

Aug. 7—"Surgery of the Liver and its Ducts."—Capt. E. E. Larson.

March Field, A.A.F. Regional Station Hospital—3:30 p.m.

Aug. 21—"The Treatment of Burns and Their Plastic Repair."—Capt. Harold T. D. Kirkham.

Camp Cooke Station Hospital—1:00 p.m.

Aug. 1—"The Rh Factor."—Capt. George Macer.

Aug. 15—"Psychosomatic Medicine."—Dr. H. Douglas Eaton.

Hoff General Hospital—8:00 p.m.

Aug. 1—"The Rh Factor."—Capt. George Macer.

Aug. 15—"Psychosomatic Medicine."—Dr. H. Douglas Eaton.

U. S. Naval Hospital, Santa Margarita Ranch—1:00 p.m.

Aug. 9—"Some Dynamics of Military Neuro-psychiatry."—Major Alex. Blumstein.

Aug. 23—"Intra-ocular Foreign Bodies."—Lt. Comdr. H. Lusic.

U. S. Naval Hospital, Long Beach—3:00 p.m.

Aug. 15—"Problems in Obstetrics."—Comdr. Wood.

U. S. Naval Hospital, Corona, Calif.—1:00 p.m.

Aug. 9—"Pulmonary Tuberculosis."—Comdr. W. L. Rogers and Comdr. A. W. Hobby.

Aug. 23—"Penicillin in Syphilis and Gonococcic Infections"—Lt. Comdr. W. W. Duemling.

U. S. Naval Air Training Station, San Diego—3:00 p.m.

Aug. 3—"Plastic Repair of Lesions of the Face and Neck."—Dr. Edward S. Lamont.

Aug. 17—"Communicable Diseases."—Major Norman Nixon and Capt. Charles Marple.

Santa Ana Army Air Base Regional and Convalescent Hospital—4:00 p.m.

Aug. 7—"Peritoneoscopy."—Capt. J. C. Ruddock.
 Aug. 21—"War Wounds of the Chest."—Lt. Comdr. J. P. O'Connor and Lt. Henry Jaffee.
U. S. Naval Hospital, San Diego, Calif.—1:00 p.m.
 Aug. 2—"Clinical Aspects of Rheumatic Fever."—Lt. Comdr. Geo. C. Griffith.

C.M.A. CANCER COMMISSION

Federal Cancer Fund Favored

Princeton, N. J., July 20.—The American public would favor a Congressional appropriation of \$200,000,000 for the study and treatment of the disease which ranks second only to heart trouble as a cause of death—cancer. Three out of four Americans say they are willing to pay more taxes to provide this money.

In 1942, 163,000 people died of cancer. To combat the disease the Cancer Society in its drive for funds succeeded in collecting approximately \$4,000,000 this year.

Survey by Institute

The American Institute of Public Opinion questioned men and women from coast to coast on the following issues:

Should Congress pass a law which would provide \$200,000,000 for the study and treatment of cancer in this country?

The vote:

Yes	81%
No	10%
No Opinion	9%

Would you be willing to pay more taxes to provide this money?

The vote:

Yes	75%
No	20%
No Opinion	5%

—George Gallup in *Los Angeles Times*, July 21.

Cancer Statistics

Harry S. Mustard, M.D., in a recent article stated: By "Cancer" the public refers to all malignant tumors. Cancer is a public health responsibility because it affects relatively large numbers of people, because its frequency as a cause of death appears to be on the increase, because in some forms, in certain locations, and in particular stages, fatal extension is preventable, and because systematized social action seems necessary in approach to the problem.

One may obtain an idea of the trend of mortality in cancer and other malignant tumors by comparing death rates from these conditions, and from tuberculosis, over a period of years. In 1900 the tuberculosis death rate was more than three times that of cancer. The one has fallen and the other risen, so that the malignant disease death rate is now nearly three times as great as the death rate from tuberculosis.

Of the 158,335 deaths caused by cancer and other malignant tumors in the Registration Area of the United States in 1940, the digestive tract was the seat of the disease in about 50 per cent. In 10.6 per cent it was cancer of the uterus; cancer of the breast in 9.8 per cent. Cancer of the buccal cavity and pharynx was the seat of 3.2 per cent of all cancer deaths. Females are more frequently affected by malignant disease than are males. Of the 158,335 deaths from that cause in the U. S. Registration Area, in 1940, 75,406 were in males, and 82,929 in females. This excess proportion of deaths in females is largely incident to the greater frequency of carcinoma of the breast in that sex, and to the frequency of carcinoma

of the uterus. Speaking in round numbers, it may be said that in the U. S. Registration Area in 1940, more than 15,000 females died of carcinoma of the breast, and less than 200 males. There were nearly 17,000 deaths from carcinoma of the uterus. Carcinoma of the buccal cavity, pharynx, and stomach are seen more frequently in males, and there were more than 12,000 deaths from carcinoma of the prostate and of the bladder in males in 1940.

The mortality rates in 1940, for cancer and other malignant tumors, are found to be 78.4 deaths per 100,000 population for Negroes, and 125 per 100,000 population for whites.

The Objectives in Cancer Control Programs are:

1. To teach the public to apply for early medical attention.
2. To influence the development of special cancer clinics, private and public, where there are ample provisions for diagnosis and treatment.
3. To influence the medical profession to make use of these special clinics in both diagnosis and treatment.
4. To encourage government and philanthropic support of institutes for cancer research, and to emphasize the need of experts in research.

COMMITTEE ON INDUSTRIAL PRACTICE

Inyo-Mono County Medical Society Acts on Revised Compensation Fee Schedule

On July 1, 1944, the Inyo-Mono County Medical Society adopted the fee schedule for Physicians and Surgeons for services rendered under Workmen's Compensation and Safety Laws, which schedule was presented to the Industrial Accident Commission of the State of California on December 30, 1942.

The following letter was sent to insurance companies:
 Bishop, California, May 14, 1945.

Gentlemen:

On July 1, 1944, the members of this society put into effect a new fee schedule for all industrial accident cases. This is the fee schedule compiled by the C.M.A. in 1942. A printed copy was mailed to your office in May of 1942.

Enclosed is a compilation of the payments received by the physicians of this area from various insurance carriers since that time.

You will note that some of these carriers have paid all accounts in full. Your company has not.

The State Compensation Insurance Fund has paid over 57 per cent of its cases in full; in 23 per cent of cases it has underpaid; and in 20 per cent of its cases it has paid in excess of our bills as rendered.

Other companies, including your own, have a similar record, varying in percentages.

Therefore, at the April meeting of this medical society it was unanimously voted to notify all companies which have not been paying our bills in full, according to our fee schedule, that after June 1, 1945, all industrial accident cases will be accepted only at our schedule, and no other. The secretary of this society will expect to receive from you, previous to June 1, a written acceptance of this condition.

If such a letter is not on file in this office by June 1, 1945, it will be necessary to get telephone authorization from your office for care at our rates, in each case. Should this not be forthcoming, it will be necessary to hold the employer responsible for the costs of care. We sincerely hope you will not make this action necessary.

Yours sincerely,
 WALTER WILSON, M.D.,
 Secretary,
 Inyo-Mono County Medical Society.

	Total Cases	In Full	Under- Paid	Over- Paid	Pending
Calif. Comp. Ins. Co.....	93	61	32	0	0
State Comp. Ins. Fund.....	77	44	18	15	0
Ind. Indemnity Exchange.....	39	20	17	2	0
Colonial Ins. Company.....	21	10	10	0	1
Nat. Automobile Ins. Co.....	20	6	13	0	1
Maryland Casualty	9	7	0	1	1
Calif. Electric Co.....	10	8	0	0	2
Travelers Ins. Co.....	7	1	6	0	0
Pacific Employers Ins. Co.....	5	1	4	0	0
Standard Accident Ins. Co.....	5	5	0	0	0
Hartford Ins. Co.....	1	0	1	0	0
Employers Mutual Liability Company of Wisconsin.....	1	1	0	0	0
Nevada Industrial	1	1	0	0	0
Fireman's Fund Indemnity.....	3	1	1	0	1
Great American Co.....	3	2	1	0	0
City of Los Angeles.....			All cases in full		

Above are listed under each insurance company a compendium of industrial accident cases treated by the physicians of the Inyo-Mono County Medical Society from July, 1944, to May 1, 1945, under the new fee schedule. The total cases are given, number paid in full, underpaid, overpaid, a few cases payment pending.

Health Hazards Improved in Certain Los Angeles Plants

Study of Los Angeles electroplating plants, initiated by the Division of Industrial Hygiene in April, has shown such remarkable improvement in conditions since a similar survey conducted in 1941, that the industry was given commendation for interest and coöperation in improving working conditions.

The earlier study had revealed at least one industrial health hazard in every plant, involving dusts, mists, gases, vapors, illumination, or sanitation. In the 15 plants visited by the end of April in the current study, these hazards had been eliminated. Chromium plating, cyanide plating, and trichlorethylene degreasing tanks were found to be equipped with adequate slot exhaust ventilation; all bright dip tanks were either exhaust ventilated or isolated in open sheds; buffing and polishing wheels were provided with exhaust ventilation; the majority of washing and toilet rooms met minimum sanitation requirements; and fluorescent fixtures had replaced many of the bare, unshaded incandescent bulbs.

California to Study Tunnel Hazards

Exposure of railroad engineers and firemen to heat, gas, and fumes while traveling through tunnels is being investigated by the Bureau of Adult Health of the State of California Department of Public Health, in a co-operative study with the U. S. Bureau of Mines, the State Railroad Commission, and the State Industrial Accident Commission.

Because of the difficulty of obtaining reliable air samples and temperature measurements during the brief run of a locomotive through a tunnel, special methods have had to be devised for the study. A mobile chemical laboratory is to be shifted from point to point for the investigation. Gas samples collected by engineers in the locomotive cabs, and in the tunnels after trains have passed through, are to be analyzed immediately by the chemist.

Tests are to be made in 21 tunnels throughout the State, many of them having steep grades which make the heat, gas, and fume conditions complained of by trainmen more severe. For steam locomotives, measurements will include air temperature, relative humidity, air veloc-

ity, carbon dioxide and oxygen, carbon monoxide, sulfur dioxide, and smoke. In the case of diesel engines, temperature measurements will be omitted, but tests of nitrogen oxides will be made.

Federal Safety Council Hears Health Plan

Accidents to Federal workers in 1944 cost the government approximately \$18,000,000 in direct compensation, it was revealed by the U. S. Employees' Compensation Commission at the quarterly meeting of the Federal Interdepartmental Safety Council held in Washington June 8. Eight government employees were injured by unsafe handling of materials to every one hurt by explosions, fire, electrical burns, or other causes.

Necessity for a health program in the Federal service was explained by Dr. John W. Cronin, Chief of the U. S. Public Health Service Dispensary, who outlined a plan for such a program. Included in the health services recommended would be a preplacement physical and mental examination of every employee, with periodic re-examination. He proposed that a medical dispensary should be established in every Federal agency of sufficient size, where treatment could be given on the job for minor illnesses and injuries, and through which a broad program of health education could be carried on. Workers suffering from serious or chronic illnesses would be referred to their private physicians.

Accidental injuries showed a considerable decrease in 1944 from the level of previous years, the detailed report submitted to the Council by the U. S. Employees' Compensation Commission indicated. The average severity of injuries also was reduced.

Rehabilitation of Handicapped Civilians Promoted

Attention of the nation was focussed upon the necessity of providing rehabilitation services for handicapped civilians as well as war veterans, with President Truman's proclamation designating June 2-9 as National Rehabilitation Week.

Employability of persons in the working age range who are handicapped by accident, disease, or congenital conditions is the goal of the program carried on by the Office of Vocational Rehabilitation, Federal Security Agency, in coöperation with the States.

About 1,500,000 men and women of working age are prevented from earning a normal livelihood by physical or mental handicaps, it was pointed out, and more are added by the annual toll of accidents and illness.

The Constitution, in all its provisions, looks to an indestructible Union composed of indestructible States.

—Salmon P. Chase, *Decision*, in *Texas v. White*, 7 Wallace, 725.

CALIFORNIA PHYSICIANS' SERVICE†

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 * * *

Executive Staff

W. M. Bowman, Executive Director
 A. E. Larsen, M.D., Medical Director
 W. H. Gardiner, M.D., Assistant Medical Director

We wish to give the California Medical Association the following progress report of California Physicians' Service from July, 1944, to July, 1945. This is not a detailed report, and the figures used are approximate. Listed below are the principal departments with a brief summary of their activities:

Beneficiary Membership

MEMBERSHIP

	July, 1944	July, 1945
Commercial Program	78,843	149,000
Housing Program.....	17,006	11,500
Rural Program	1,184	2,000

INCOME

Commercial Program (monthly income) . . .	\$85,000	\$168,000
Housing Program (monthly income) . . .	27,381	17,300
Rural Program (monthly income) . . .	2,849	3,070

BENEFICIARY MEMBERSHIP

In the Commercial Program, our membership as well as the dues income has almost doubled during the last 12 months.

PROFESSIONAL RELATIONS

(a) In September, 1944, this Department was established in order to improve our relationship with professional members. Four persons were employed and trained to contact the doctors, their nurses, and secretaries. A C.P.S. "Information Kit" for doctors offices was prepared which contained a summary of benefits for beneficiary members, a facsimile of membership cards, fee schedule, and other pertinent material. To date more than 2,000 doctors offices have been visited.

(b) We have supplied a C.P.S. speaker for many County Medical Society meetings. Medical Staff meetings in a number of the Metropolitan hospitals have been attended by our speakers.

(c) Articles are written and submitted to various County Medical Societies who issue monthly bulletins.

(d) Active drives for new professional members are handled by our Professional Relations Department. Over 300 new doctors have joined during the last year. To date C.P.S. has 5,600 professional members. We have found that this department is doing a great deal to perfect our working relationship with professional members.

PUBLIC RELATIONS

This Department was organized in March, 1945, and

† Address: California Physicians' Service, 153 Kearny Street, San Francisco. Telephone EXbrook 0161.

Copy for the California Physicians' Service department in the OFFICIAL JOURNAL is submitted by that organization through W. M. Bowman, Executive Director.

has four trained speakers. Its purpose is to inform the business men of the State on Voluntary Health coverage as offered by the doctors and hospitals. To date 97 talks have been given to service groups such as, Rotary, Kiwanis, Lions, Chamber of Commerce, Optimists, and various women's clubs. Approximately 3,840 business men and women have heard our speakers. Endorsements from the Chamber of Commerce, Merchants and Manufacturers, Downtown Business Men's Associations and other such organizations have been due to the efforts of this department. The primary functions of our Public Relations is to produce leads for the Sales Department. The speakers reports show that only 5 per cent of the audiences have ever heard of the doctors and hospital service. Many new groups are now being written by our Sales Department through the work of Public Relations.

HOUSING PROGRAM

The C.P.S. War Housing projects are disintegrating. As you know these were to be temporary, and it seems that their purpose is almost at an end. We are closing the two medical centers in Long Beach, namely: Wilmington Hall and Channel Heights on July 15 and August 1, 1945. This leaves only two C.P.S. Housing Projects in the State, Vallejo and Marin City. Our project in Marin City is rapidly being taken over by evacuees from the Orient and Army and Navy personnel. It cannot last very long. Vallejo is still an acute area, and the Housing Project Medical Centers will remain for some time due to a request by the Solano County Medical Society.

FARM SECURITY PROGRAM

C.P.S. has rendered care to some 2,000 low income farm families. This program was carried on in conjunction with the Farm Security Administration. The doctors were paid a unit value of \$1.50. We are now negotiating with the California State Grange, which has a membership of about 25,000 farmers—with dependents this represents about 80,000 persons. Our Two-visit Deductible and Surgical service is being offered. If the Grange or any other large farm group accept our service we will then liquidate the old Farm Security Plan, and place all coverage under our Commercial Program.

RATE INCREASE

C.P.S. has had a long hard struggle in returning a reasonable fee to its professional members. Much ill-will has been caused because of a low unit value. From an all-time low unit of \$1.20 three years ago, C.P.S. has gradually corrected certain functions, and during the last 15 months has paid a unit value of \$2.25, which is 90 per cent of the par, \$2.50. In order that we could reach par and at the same time broaden out benefits to beneficiary members, the Trustees voted a rate increase of approximately 30 per cent to beneficiary members the first part of December, 1944. Due to objections by the Hospital Association this was held up until April of 1945. However, the rate of increase is 95 per cent completed, and we have lost less than $\frac{1}{4}$ of 1 per cent membership due to this rate increase.

REVISION OF ADMINISTRATION

Since the May meeting of the House of Delegates C.P.S. has been undergoing certain changes in its administration. New personnel for key positions are being brought in, two from out of the State, and several from within the State. Some of our older personnel are being placed in positions for which they are better fitted. Office procedures and functions are being revised and streamlined.

This report lists most of the principle functions of C.P.S. Although some of these have been in operation

only a short time the results have convinced me that they will add to the growth and efficiency of C.P.S. I am not over-optimistic in predicting that C.P.S. will double and probably triple its present beneficiary membership during the next 12 to 14 months. Responsibility for much of our success and development continues to rest with our professional members, for it is they who are rendering the service.

California Coördinating Committee—Re: C.P.S.
(COPY)

WAR MANPOWER COMMISSION
PROCUREMENT AND ASSIGNMENT SERVICE
For Physicians

San Francisco, July 5, 1945.

Philip K. Gilman, M.D.,
Chairman of the Council,
California Medical Association.

Dear Doctor Gilman:

I am enclosing herewith a copy of a letter to the Board of Trustees of the California Physicians' Service which I was directed to write by the members of the Coördinating Committee, Procurement and Assignment Service, at their last meeting. I realize that without the backing of the Executive Committee and the Council of the California Medical Association that the California Physicians' Service would have been unable to carry on these programs as it has. It was, therefore, the consensus of the Coördinating Committee that I should again express its appreciation to the Council of the C.M.A. for its backing and coöperation during this emergency.

With my kindest regards, I remain,

Sincerely yours,

(Signed) HAROLD A. FLETCHER, M.D.
*California State Chairman for Physicians
Procurement and Assignment Service.*

* * *

(COPY)

WAR MANPOWER COMMISSION
PROCUREMENT AND ASSIGNMENT SERVICE
For Physicians

San Francisco, July 5, 1945.

Lowell Goin, M.D.,
Chairman of the Board of Trustees,
California Physicians' Service,
1930 Wilshire Boulevard,
Los Angeles, California
and

Chester L. Cooley, M.D.,
Secretary, Board of Trustees,
California Physicians' Service,
490 Post Street,
San Francisco, California.

Gentlemen:

At the regular meeting of the Coördinating Committee of the Procurement and Assignment Service of June 5, 1945, I am instructed to write to the Board of Trustees of the California Physicians' Service expressing the appreciation of the Coördinating Committee of Procurement and Assignment Service for the real aid and contribution to the war effort which has been made by the California Physicians' Service. With the tremendous needs of the military forces for medical personnel and with the tremendous expansion in population in certain

localities in California antedating and following the Pearl Harbor attack, there were many problems of medical care which the Procurement and Assignment Service was called upon to solve. One of the greatest problems, of course, was medical coverage in many of the housing projects in critical areas where the population mushroomed to a tremendous size without any previously worked out plan for medical care. The Procurement and Assignment Service was faced with several alternatives at different times, many of which would have been dangerous to the future of the medical profession.

California was fortunate in having an organization in the California Physicians' Service, backed by the medical profession, which could, during the emergency, expand its activities to cover these emergency needs. Had not the California Physicians' Service willingly and patriotically coöperated with the war effort, the critical needs would not have been met; or if they had been met, it would have been through means which would probably have jeopardized the future of many physicians patriotically serving their country in the military forces, and would have undoubtedly undermined the freedom of the practice of medicine in California. Although the California Physicians' Service was not set up to undertake this type of medical coverage, with the backing of the California Medical Association it was able to meet the needs when called upon to do so. The Coördinating Committee has appreciated the coöperation of both the California Medical Association and the California Physicians' Service which it has had at all times. The work of the California Physicians' Service in meeting emergency needs in housing projects and expansion areas has been outstanding and has entailed a tremendous amount of organizational and executive work. At times it has had to fight organized resistance to it on the part of extreme leftists organizations as well as, unfortunately at times, resistance on the part of the medical profession. It is to be noted, however, that in practically all those cases where the medical profession coöperated the program in the housing projects has been successful both from the standpoint of the patient as well as the local physician.

It is the opinion of the Coördinating Committee that, in spite of many complicated and varying difficulties under which it had to work, the California Physicians' Service has contributed an outstanding service to the war effort in California.

Yours very truly,

(Signed) HAROLD A. FLETCHER,
*Chairman, Coördinating Committee
on Medical Care,
Procurement and Assignment Service.*

P.S.—For your information, I am appending a full list of the membership of the Coördinating Committee of Procurement and Assignment Service.*

H.A.F.

* * *

*Membership of the Coördinating Committee of
Procurement and Assignment Service*

Harold A. Fletcher, M.D., Chairman, Room 1331, 450 Sutter Street, San Francisco 8, California.

George E. Ebright, M.D., Vice-Chairman, 384 Post Street, San Francisco, California.

Mr. John Hunton, Secretary, Room 2004, 450 Sutter Street, San Francisco 8, California.

(*Ed. Note.—In the Harbor Area of Los Angeles, C.P.S. rendered notable service in housing projects at Wilmington, Banning Homes and Channel Heights. So also in housing projects in the San Francisco Bay area. At the Richmond Center, California Medical Association coöperated with C.P.S. by subsidizing the medical center to a total of \$6,266.30, as noted in June CALIFORNIA AND WESTERN MEDICINE, on page 346, under item 8.)

Colonel W. T. Harrison, Regional Medical Director, U. S. Public Health Service, Appraisers' Building, San Francisco, California.

Wilton Halverson, M.D., Director, State Dept. of Public Health, 760 Market Street, San Francisco, California.

Morton Gibbons, Sr., M.D., Chief Emergency Medical Service, State War Council, 411 Phelan Building, 760 Market Street, San Francisco, California.

Ernest Sloman, D.D.S., Dental Chairman, Ninth Corps Area, Procurement and Assignment Service, 344 14th Street, San Francisco, California.

John W. Leggett, D.D.S., California State Chairman for Dentists for Northern California, 490 Post Street, San Francisco, California.

Albert E. Larsen, M.D., Medical Director, California Physicians' Service, 153 Kearny Street, San Francisco, California.

Karl L. Schaupp, M.D., Ninth Corps Area Chairman, Procurement and Assignment Service, 490 Post Street, San Francisco, California.

Anthony J. J. Rourke, M.D., Superintendent, Stanford Hospital, Clay and Webster Streets, San Francisco, California.

L. R. Chandler, M.D., Dean, Stanford University Medical School, Clay and Webster Streets, San Francisco, California.

William P. Shepard, M.D., Medical Director, Metropolitan Life Insurance Company, 600 Stockton Street, San Francisco, California.

Mr. Thomas Clark, Executive Officer, Association of California and Western Hospitals, 1182 Market Street, San Francisco, California.

Miss Marian Alford, R.N., Chairman, Procurement and Assignment Service for Nurses, 26 O'Farrell Street, San Francisco, California.

Mrs. M. E. Schmidt, R.N., Nurse Deputy to Chief of Emergency Medical Service, State War Council, 411 Phelan Building, 760 Market Street, San Francisco, California.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

Commonwealth Club of San Francisco Votes on Sickness Insurance Plans

By a two to one vote, Commonwealth Club of California members have indorsed voluntary health insurance, a tally revealed in July. Members expressed their opposition to compulsory plans in another ballot, however, it was announced.

Voting followed study of the question by the club's public health section.

Club officers said that, while opposing compulsion, the majority held that if a compulsory plan were adopted, the "free system" of paying doctor bills would be preferable to the "per capita system." The majority also held that if a compulsory plan were adopted, Governor Warren's bill in the recent legislative session would be preferable to the C.I.O. bill.

Members favored State regulation of voluntary health plans as to character and solvency, premiums charged and extent and quality of services. They opposed State financial assistance to voluntary plans, but favored educational assistance and legal status clarification.

Complete results follow:

I. (a) Should California encourage voluntary enrollment of its citizens in various private prepayment health plans? (Yes 859, No 248)

(b) Should it be done now? (Yes 776, No 175)

II. (a) Should California establish some compulsory prepayment health insurance system? (Yes 451, No. 741)

(b) Should it be done now? (Yes 406, No 549)

III. If, regardless of your opinion above, some such system is to be established, which is preferable:

- (a) Voluntary? (833) OR
- (b) Compulsory? (403)

IV. If any compulsory system is established which of the following general proposals should be adopted:

- (a) Adoption of a compulsory insurance plan in which citizens who are employees will prepay for doctor, surgical, and hospital services through automatic deductions from salaries or wages as a payroll tax? (907)
- (b) Direct public support of all health services through other taxation? (241)

V. If "I" above were adopted should the State assume regulatory powers over private prepayment health plans as to:

- (a) Character and solvency of any organization offering a prepayment health service? (Yes 1072, No 117)
- (b) Premiums charged? (Yes 866, No 301)
- (c) Extent and quality of services to be rendered? (Yes 884, No 280)

VI. If "I" above were adopted, should the State encourage voluntary prepayment health plans by:

- (a) Rendering financial assistance? (Yes 336, No 788)
- (b) Clarifying legal status? (Yes 921, No 197)
- (c) Giving educational assistance? (Yes 918, No 224)

VII. If "II" above were adopted, should the physician be paid:

- (a) Per unit of services he renders (i.e., "fee system")? (906)
- (b) Per patient enrolled with him (i.e., "capitation system")? (240)

VIII. If "II" were adopted, should provision be made in it for health service for the indigent? (Yes 853, No 279)

IX. If "IV-a" were to be adopted, should the cost be borne:

- (a) By payments entirely from the employee? (359)
- (b) By joint payments from both employee and the employer? (329)
- (c) By joint payments from the employee, the employer, and the State? (480)

X. If "IV-a" above were adopted

- (a) Should the plan require an employee to pay in full or in part for the first visit to a physician in any illness? (Yes 85, No 340)
- (b) Should limitations be placed upon

(1) Length of time during which a physician's service would be available for an illness? (Yes 415, No 629)

(2) Length of hospitalization for an illness? (Yes 429, No 558)

(c) Should the employee be required to pay the first \$50 of bills for illnesses in any one year and the Fund pay all further medical and hospital bills? (Yes 502, No 512)

XI. If compulsory health insurance is established, should the State encourage private groups to provide service under the Act? (Yes 808, No 205)

XII. Of following proposed plans recently before the Legislature, which do you consider satisfactory?

- (a) Assembly bill 800 (Gov. Warren's bill)? (Yes 405, No 334*)
- (b) Assembly bill 449 (C.I.O. bill)? (Yes 141, No 504†)
- (c) Assembly bill 1200 (Calif. Med. Assn. bill)? (Yes 403, No 370‡)
- (d) Senate bill 219 (Farm Bureau bill)? (Yes 99, No 526§)

XIII. If either of the COMPULSORY health insurance proposals recently before the Legislature were to be adopted, would you prefer:

- (a) Assembly bill 800 (Gov. Warren's bill)? (809)
- (b) Assembly bill 449 (C.I.O. bill)? (124)

XIV. Do you favor a compulsory plan for hospital care alone? (Yes 182, No 890)

XV. Do you think the present Legislature should study the question of health measures through an interim committee until the next session? (Yes 814, No 270)

XVI. Should the present Legislature refer the general question of compulsory health insurance to a popular vote? (Yes 510, No 594)

* 469 did not answer. † 613 did not answer. ‡ 485 did not answer. § 633 did not answer.

Why forego the advantages of so peculiar a situation? Why quit our own to stand upon foreign ground? Why, by interweaving our destiny with that of any part of Europe, entangle our peace and prosperity in the toils of European ambition, rivalship, interest, humor or caprice?

—George Washington, *Farewell Address*,
17 September, 1796.

MISCELLANY

Under this department are ordinarily grouped: News Items; Letters; Special Articles; Twenty-Five Years Ago column; California Board of Medical Examiners; and other columns as occasion may warrant. Items for News column must be furnished by the fifteenth of the preceding month. For Book Reviews, see index on the front cover, under Miscellany.

NEWS

Coming Meetings*

California Medical Association. Session will convene in Los Angeles. Dates of the seventy-fifth annual session, to be held in 1946, will be announced later.

American Medical Association. The 1945 Session, previously scheduled for Philadelphia, will not be held.

The Platform of the American Medical Association

The American Medical Association advocates:

1. The establishment of an agency of Federal Government under which shall be coördinated and administered all medical and health functions of the Federal Government, exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health, and the care of the sick or proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical service and to increase their availability.

8. Expansion of public health and medical services consistent with the American system of democracy.

(Ed. Note.—Interpretative comments on principles included in the A.M.A. platform appear in CALIFORNIA AND WESTERN MEDICINE for December, 1939, on pages 394-395. For subsequent comment, see J.A.M.A., June 24, 1944, pp. 574-576. See also C. AND W. M. for August, 1945, pp. 61-62.)

Medical Broadcasts*

The Los Angeles County Medical Association:

The following is the Los Angeles County Medical Association's radio broadcast schedule for the current month, all broadcasts being given on Saturdays:

KFAC presents the Saturday programs at 10:15 a.m., under the title, "Your Doctor and You."

In August, KFAC will present these broadcasts on the following Saturdays: August 4, 11, 18, and 25.

The Saturday broadcasts of KFI are given at 9:45 a.m., under the title, "The Road to Health."

"Doctors at War":

Radio broadcasts of "Doctors at War" by the American Medical Association is on the air each Saturday at 1:30 p.m., Pacific War Time.

* In the front advertising section of *The Journal of the American Medical Association*, various rosters of national officers and organizations appear each week, each list being printed about every fourth week.

* County societies giving medical broadcasts are requested to send information as soon as arranged.

Pharmacological Items of Potential Interest to Clinicians*:

1. *Notes on Books:* In addition to Tom Keys' fine and finely illustrated account of *The History of Surgical Anesthesia*, the volume contains an excellent essay by Noel Gillespie pointed to the future, and a neat bibliographical account of Morton items by John Fulton (Schuman's, 20 E. 70, N. Y. 21, 1945, \$6). D. T. Starner's edition of W. Clowes' *Books of Medical Observations* (1596) is interesting but poorly lithographed (Scholars' Facsimiles and Reprints, N. Y., 1945). Another well illustrated pertinent survey is N. Taylor's *Cinchone in Java* (87 pp., Greenberg, N. Y., 1945, \$2.50). J. Wiley, 440 4th Ave., N. Y. 16, offers R. S. Bates' *Scientific Societies in the United States* at \$3.50 and A. L. and K. B. Winton's *Analysis of Foods* at \$12. W. B. Cannon stimulatingly discusses *The Way of an Investigator: A Scientist's Experiences in Medical Research*, in summing up his fruitful years (W. W. Norton, 70 5th Ave., N. Y. 11, 229 pp., 1945, \$3). A. Kardiner studies *The Individual and His Society: The Psychodynamics of Primitive Social Organization* (Columbia Univ. Press, 305 pp., 1945, \$4). Important for book publication is R. J. Henry's *Mode of Action of Sulfonamides*, a fine critical review with 698 references (Publ. Josiah Macy Jr. Foundation, Review Series, 2:1-285, 1944). Note *Report of Survey of Medical Records Created by Federal Government* (National Research Council, 180 pp., Washington, 1945).

2. *Notes on Symposia:* Otherwise helpful symposium on sympathomimetic agents held by American Chemical Society (*Ind. Eng. Chem.*, 37:116-151, 1945) is unbalanced by failure to include summary by Gordon Alles. R. J. Williams & Co. issue interesting series of Cancer Studies (*Univ. Texas Publ.*, No. 4507, Austin, 1945) with articles on virus-like tumor agent by A. Taylor and tumor effects on Hb by R. E. Hungate. R. A. Willis offers stimulating review of recent advances in experimental production of tumors (*Med. J. Austral.*, 1:361, Apr. 14, 1945). About 600 reports in 1945 Federation Proceedings ranging from H. W. Ades on the corpus callosum to C. Weiss and N. Halliday on tuberculo-carbohydrates and phosphatides (*Fed. Proc.*, 4:1-166, 1945), of which fair share is Blakian!

3. *Summer Simmerings:* H. A. Howe tells why it doesn't help to be afraid of polio in an excellent summary of current thought (*Harper's*, 190:646, June, 1945). D. Ludwig offers a pertinent and well documented review on effects of atmospheric humidity on animal life (*Physiol. Zool.*, 18:103-135, 1945). T. F. Rose discusses urinary colic due to crystalluria and calculi in hot humid climates (*Med. J. Austral.*, 1:558, June 2, 1945). C. P. Mathe neatly reviews differential diagnosis and treatment of anuria (*Urol. Cutan. Rev.*, 49:223, 1945). R. M. Stecher makes a pleasant plea for more light (*Bull. Med. Lib. Asso.*, 33:220, 1945).

4. *Notes on Body Composition:* H. H. Mitchell & Co. discuss chemical composition of adult human body with reference to calcium and its bearing on biochemistry of growth, finding subjects vary by 25%, and that much calcium is lost by sweating (*J. Biol. Chem.*, 158:625, 1945). E. N. Rathbun, N. Pace & Co. find female body

* These items submitted by Dr. Chauncey D. Leake, formerly director of the University of California Pharmacological Laboratory, now dean of the University of Texas Medical School, Galveston, Texas.

averages 4.7% more fat than male; water averages 72.4% fat free body mass with standard deviation of 2.1%; chemically combined nitrogen averages 3.5% lean body mass, standard deviation 0.27%; lean body mass relatively constant, with fat as a diluent (*Ibid.*, p. 667-691). L. Arnold & Co. report general health and mental performance, but not physical prowess, is superior in good eater as compared with bad eaters in 7 year olds (*S. Afr. J. Med. Sci.*, 10:9, 1945).

5. Notes: J. K. W. Ferguson and L. P. Dugal note RQ of expired air may be used to calculate relations between CO_2 and O_2 tensions in alveolar air (*Canad. J. Res. Med. Sci.*, 23:32, 1945). H. Koteen gives encouraging survey of lymphogranuloma venereum (*Med.*, 24:1, 1945). F. C. Waring proposes estimation of ratio of maximum lung ventilation to walking ventilation as a guide to thoracoplasty (*Amer. Rev. Tb.*, 51:432, 1945). A. Lacassagne & Co. of reviving Paris find that application of weak carcinogenic hydrocarbons inhibits subsequent action of strong carcinogens of like molecular structure, by blocking (*Brit. J. Exp. Path.*, 26:5, 1945). A. K. James recommends 2 mgm carbaminoylecholine thrice or more daily to reduce migraine attacks (*Brit. Med. J.*, 1:663, May 12, 1945). E. J. Boell reports that nerve degeneration results in marked reduction in choline esterase activity (*J. Cell. Comp. Physiol.*, 25:75, 1945). H. Hartridge discusses change from trichromatic to dichromatic vision in human retina (*Nature*, 155:657, June 2, 1945).

Dr. Robert Peers, Colfax Mayor for 23 Years, Resigns.—Colfax (Placer Co.), July 11.—After serving as mayor of this city for more than 23 years, Dr. Robert A. Peers last night resigned from the city council. . . .

Dr. Peers first was elected to the city council in 1921 and in 1922 he was elected mayor, a post to which he has been reelected each successive two years.

The local physician, a former president of the California Medical Association, recently was elected a member of the board of trustees of the American Medical Association. . . .—*Sacramento Bee*, July 11.

Unusual Newspaper Advertisement.—One of the San Francisco pharmacies (Bowerman's) in a recent 4 by 4 inch display advertisement having the caption *Don't Neglect Your Doctor's Bill* gives additional advice as follows:

"It is your doctor who has studied for years to serve life and maintain health. Working constantly, he is on call 24 hours a day. So when it is time to pay the bills, don't forget the man who does so much for you—your doctor."

On Prevention of Colds.—Everyone can achieve some immunity from acute respiratory infections such as colds; most people need never have a cold again, according to Dr. Marshall C. Cheney, associate physician, Student Health Service, on the Berkeley campus of the University of California. Summing up data secured from observations of eighteen years on more than 20,000 university students, Dr. Cheney says that cold vaccine plus proper hygiene and other therapeutic measures will protect all except those unfortunate individuals who have inherited extremely poor automatic defense. . . .—University of California *Clip Sheet*, July 23.

The Eye-Bank for Sight Restoration, Inc.—Teaching and research fellowships to extend the knowledge and skill required for the delicate operation which restores sight to a blind person with a corneal defect

through the grafting of healthy corneal tissue will be established in leading medical schools throughout the country by The Eye-Bank for Sight Restoration, Inc., 210 East 64th Street, New York City, it was recently disclosed by Mrs. Henry Breckinridge, executive director. To carry on this program of education and research, as well as its other activities, The Eye-Bank will undertake to raise \$1,000,000, Mrs. Breckinridge announced at national headquarters.

An initial grant of \$25,000 has been made by the Milbank Memorial Fund to enable The Eye-Bank to function pending the time when the importance of the undertaking may gain recognition and widespread support. It is hoped that financial support will be forthcoming from the general public in sums of any amount.

In a statement accompanying Mrs. Breckinridge's announcement, Albert G. Milbank, president of the Milbank Memorial Fund and chairman of the Advisory Council of The Eye-Bank, expressed "the hope and expectation that The Eye-Bank for Sight Restoration, Inc., will make important contributions to public health by advancing our knowledge of the pathology of the eye, thus making the prevention of eye diseases more effective, by improving or restoring the sight of persons who are handicapped by corneal opacities, and by its educational procedures which should arouse interest in sight conservation among physicians, specialists and the public."

Red Cross Announces Civilian Blood Donor Recruiting Program.—American Red Cross chapters throughout the nation will be permitted to recruit blood donors for civilians under a program announced by National Chairman Basil O'Connor. Under this project any Red Cross chapter may take part in the operation of a donor center for civilians sponsored by a recognized medical or health agency. The blood collected and the blood derivatives produced will be made available without cost to physicians, hospitals, clinics and patients.

This civilian program is entirely separate from the Blood Donor Service operated by the American Red Cross for the Armed Forces, and chapters in the eleven metropolitan centers where the Red Cross is now recruiting donors for the Army and Navy will not participate in it. These are: Los Angeles, San Francisco, Oakland, Portland, Ore., San Diego, Chicago, New York, Brooklyn, Boston, Philadelphia, and Washington.

The formal announcement of the new program stated in part:

"The need for provision of blood and such derivatives as blood plasma and immune (measles) globulin in amounts sufficient to meet civilian needs is very real and great. Their unique and vital place in medical practice, so strongly emphasized by the war, is becoming widely recognized by medical and health agencies throughout the country, and many of these agencies already have developed or are planning programs to insure the provision of blood and its derivatives to meet civilian needs. The American Red Cross is now preparing to help its chapters to assist in this essential service."

Assistance in establishing standards and conducting a civilian program will be made available to chapters through the five Red Cross area offices. The new project will be supervised by an advisory committee of specialists to be appointed.*

The National Society for the Prevention of Blindness, Inc.—The Leslie Dana Gold Medal, awarded annually for outstanding achievements in the prevention

(* Ed. Note.—For action of C.M.A. Council concerning a State Blood Bank in California, see CALIFORNIA AND WESTERN MEDICINE for June, page 345, item 6.)

of blindness and the conservation of vision, will be presented this year to Dr. William Zentmayer of Philadelphia, it is announced by the National Society for the Prevention of Blindness.

This highly prized token of recognition in the field of public health is given upon the recommendation of the Association for Research in Ophthalmology.

Despite his 80 years, Dr. Zentmayer is in active practice as an ophthalmologist. He is Professor Emeritus of Diseases of the Eye, Graduate School of Medicine, University of Pennsylvania.

The conditions of the Leslie Dana Gold Medal award set forth that it is to be made for "long meritorious service in the conservation of vision in the prevention and cure of diseases dangerous to eyesight; research and instruction in ophthalmology and allied subjects; social service for the control of eye diseases; and special discoveries in the domain of general science or medicine of exceptional importance in conservation of vision."

Immune Serum Globulin for the Prophylaxis and Modification of Measles.—The report received from health officers and physicians through July 15, 1945, by the California State Department of Public Health on the use of immune serum globulin for the prophylaxis and modification of measles showed the following results:

Total reports received	448
No measles	304 (68%)
Measles	142 (32%)
Not stated	2

Of the 142 recipients who subsequently developed measles, 101 were classified as mild cases, 33 as moderately severe and only 8 as severe.

The reports also showed that in 330 cases or 74 per cent of the total, the immune serum globulin was administered within six days after the date of exposure.

This product may be ordered from: Bureau of Acute Communicable Diseases, California State Department of Public Health, 1122 Phelan Bldg., 760 Market St., San Francisco 2, California.

Press Clippings.—Some news items from the daily press on matters related to medical practice follow:

Physicians

It is a reasonable thought that reduction in the size of the army after the victory in Europe should free some doctors to return to civilian practice where there is a great shortage. However, this is not a matter for curbside opinion. A Senate subcommittee went to work yesterday on the only line that can develop the facts, an investigation. The Army may not like to let go of any of its doctors, but the Senate has means to find out whether it still needs all those in uniform or could spare some without harm. As to the present scarcity of physicians in many communities there is no question.

This is a matter on which, if the Senate finds good reason, it may be able to do something promptly. The question of an adequate number of physicians for civilian needs in the future, which the subcommittee also proposes to look into, is not subject to swift action. Classes in medical schools have fallen off markedly, due to the draft. These years lost in the training of doctors are gone and cannot be made up by short cuts if standards are to be maintained. To make them good eventually may need some special encouragement of young men to undertake the arduous course necessary to prepare for the practice of medicine.—Editorial in *San Francisco Chronicle*, July 12.

Rupert Hughes Address—On "Cradle to Grave" Proponents

On June 16, 1945, the National Broadcasting Company presented Rupert Hughes . . . soldier, novelist, historian and humorist. Some excerpts from his address follow:

We are indeed fearfully and wonderfully made; and we live in a fearful and wonderful world. The cosmic rays that pierce us with their subtle lightnings come from out-

side our sphere. The starlight that falls so gently upon our eyes may have come from some far star that died a hundred thousand years ago. Yet we shall never know it, for the last of its rays will not reach the earth for another fifty thousand years or more. . . .

The danger of life today—and a growing danger—is that in trying to make everybody on earth our neighbor and our responsibility, we shall have no neighbors at all and we shall become not helpers but horrible meddlers.

Today we are being hounded to death by professional lovers of all mankind, universal busybodies; who have taken the whole world as their nurseries.

They promise us "security from the cradle to the grave." But who wants such security as they could give from such people as they are? What we really want is security from the security-mongers.

But why guarantee us only security from the cradle to the grave. Why stop there? One of the most important things in life is selecting your grandfather and mother. Most people put it off till too late. Will the government take care of that prenatal insurance—give us security before the cradle?

And why stop providing Security at the edge of the grave? That's when insecurity really begins. And that's too late, usually, to do much about it. . . .

Can anyone really look at the government today and the vast armies of municipal, state and federal employees and bosses who make up government, and trust either his immortal soul or his mortal body to it? Can anybody look at that mob and call it Papa or Mama and feel safe in its arms? . . .

These people who would save everybody on earth from any of the risks of life are not really the big-hearted lovers of mankind they pretend to be. They are simply the old familiar type of philanthropist who is far sighted that he ignores the suffering all about him.

I have encountered those very people before in appeals I have made for certain poor sufferers I wanted them to help relieve. They actually answered, "We are going to put an end to poverty. We are too busy to turn aside for mere individuals."

So these cosmic benefactors who would feed all the earth, keep everybody rich and happy, are overlooking and trampling the wretchedness all about them.

You may have noticed that they themselves draw salaries. They do not employ others. They build no factories. They sell their writings and their eloquence, but pay no wages, feed no hungry. Their very philanthropy is for sale. While shouting slogans about providing for everybody, they provide first for themselves. They make good money and win themselves glittering names as philanthropists. But they are apt to be hollow shells when it comes to helping their immediate neighbors and their own poor relations.

The worst of it is that by monopolizing the claims to kindness and hogging up all the credit for loving mankind, they make the rest of us look selfish and cruel. If you say you are afraid to try to feed all the world, they point you out as a brute without heart.

Their latest atrocity is the slogan: "Poverty anywhere is a Menace everywhere."

That is a slogan to put an end to all slogans. . . .

These omnibus philanthropists who would save all mankind or none, used to wall that more than one-third of our population is ill-fed, ill-housed, and ill-clothed. And they said that the government must try to feed everybody well, give everybody what he thinks is a proper house, and dress him and her to their liking.

Where will they stop? Everybody will make everybody rich.

Could anything be more insane? Nothing, except most of the other proposals of these fanatics who are running away with people's wits. What is it to be ill-fed? Most of us eat far too much. What is it to be ill-clothed? The sunlight is medicine. Ill-housed? He who has a mansion envies him who has a castle. . . .

Permanente Hospital Pharmaceutical House

Infra-red lamps have gone into pharmacy. They do highly important work in the plant of Royfield and Company, 4921 Broadway, Oakland, manufacturers of pharmaceutical products and distributors of hospital supplies and equipment. This firm's primary purpose is to furnish medicines and other essentials to the Permanente Hospitals established, at the suggestion of Henry J. Kaiser, in Oakland, Richmond, Fontana and Vancouver, Washington. But the establishment also serves other institutions and industries. It is owned by Dr. Sidney R. Garfield, director of the Permanente Hospitals, and his associate, Dr. C. C. Cutting. . . .—San Francisco *P. G. and E. Progress*, July.

A Constructive Program

John H. Fitzgibbon, M.D., Portland, Oregon, chairman, Council on Medical Service and Public Relations of the American Medical Association, in a recent statement to physicians and secretaries of medical organizations in Chicago, said: "The health of the people of America is our direct concern and a responsibility that cannot be ignored. . . . As medical men and women, we possess information needed by lawmakers and other public servants. . . ."

"The objective of the American medical profession is 'availability of medical care of a high quality to every person in the United States.' . . ."

"Since 1875 . . . the American Medical Association has advocated 'the establishment of an agency of Federal government under which shall be coordinated and administered all medical and health functions of the Federal government, exclusive of those of the Army and Navy' . . ."

Other points emphasized by the Association and stressed by Dr. Fitzgibbon are:

(1) Extension of medical services to all the people and the utmost utilization of qualified medical and hospital facilities already established.

(2) Continued development of the private practice of medicine, subject to change necessary to maintain quality of medical services and increase their availability, including extension of voluntary hospital and medical insurance.

(3) Expansion of public health and medical services consistent with the American system of democracy.

(4) Allotment of public funds, on proof of need, to states when needed for prevention of disease, promotion of health and care of sick.

(5) That public health and medical service is primarily a local responsibility.

(6) The development of a mechanism for expansion of preventive medical services for the indigent, with local determination of needs and local control of administration.

Medical care can be made available to all through the co-operation of medical and allied professions, government, industry, labor and other interested groups, whereas continued attempts at compulsion will aggravate confusion and delay the earliest availability of a high quality of medical service to every person.—San Francisco *Western Underwriter*, May.

Hope For Better Veteran Care

The reports by veterans organizations of poor conditions in various veterans hospitals throughout the Nation are shot with one significant undercurrent.

Bad food, low morale, inefficient operation, overcrowding, inadequate recreation, arrogant administration and medical and surgical lasses are charged in nearly all instances to the handicap of "bureaucratic control, official red tape and regimentation." To every family of a serviceman or veteran, that is vitally important information.

There is no lack of money, certainly for the imperative purpose of taking proper care of our veterans. With the appointment of General Bradley, veteran of this war, as head of the Veterans' Administration, there should be a complete housecleaning and thorough reorganization to assure every boy who risked his life for his country, the finest care available, unhampered by the red tape and regimentation that petty officialdom heaps so heavily on the shoulders of otherwise competent veteran administrators and medical men.

"Veterans are thoroughly sick of those tactics when they get their discharge papers," declared Fred Kraft, San Diego Assemblyman, as the Legislature adjourned last week. "That is why we refused at this session to embroil the people in any compulsory plan of medical insurance. The story would be exactly the same—red tape, politics and regimentation—when a fellow really needs a competent doctor or a good rest!"

If we are not to deal shabbily with our fighting men, conditions in many of the veterans hospitals must certainly be improved. Only high type hospital personnel, relieved of some of the bureaucratic, paper-pushing chores that impede the job they really want to do, can help this Nation discharge its solemn obligations to its veteran sons.

The spring issues of Reader's Digest and Cosmopolitan (one a reprint) were shocking in their illuminative information regarding hospitals under Veterans' Administration.

It's time for improvement—and hope is in General Bradley's appointment.—King City *Rustler-Herald*, June 21.

Forty San Francisco Doctors Form Guild

Approximately forty San Francisco physicians and surgeons have formed a guild to serve as a collective bar-

gaining agency in what is believed to be the first union of doctors in the United States, it was learned today.

The physicians, all on the staff of the Southern Pacific Hospital, have elected Dr. James Guilfoil president of the guild.

"The purpose of the guild is to provide a collective bargaining agency under the provisions of the Wagner act—to represent the doctors in matters of wages and hours, if, as and when necessary," a spokesman of the organization said.

The union, according to its members, did not grow out of any controversy with the labor-employer management of the S. P. Hospital, but is the result of several years' thinking. They described relations at the hospital as "harmonious."

The guild is not affiliated with the A.F.L., C.I.O. or any other labor organization.

Dues of Southern Pacific employees in the hospital association were increased, but spokesmen for the guild declared this was caused by increased costs and not because of the doctors union.

In addition to Dr. Guilfoil, officers of the guild include:

Vice-President, Dr. Edmund J. Morrissey; secretary, Dr. Robertson Ward; treasurer, Dr. Wilber F. Swett; directors, Drs. Thomas E. Gibson, James J. McGinnis, Vance M. Strange and John Jay O'Connor.—San Francisco *Call-Bulletin*, August 1.

Forty San Francisco Physicians With Southern Pacific Hospital Organize First Medical Guild

In what is believed to be the first union of its kind, approximately forty San Francisco physicians, surgeons and dentists have formed a group called the Railroad Physicians and Surgeons Guild here, it was disclosed yesterday.

All are members of the staff of Southern Pacific Hospital in San Francisco.

A spokesman denied reports that the prime purpose of the guild is to provide a collective bargaining agency under provisions of the Wagner Act, declaring:

"We sought to organize, so that we could co-operate with the Southern Pacific Company, the hospital, and its board of managers to give better service.

"In our purposes outlined for the guild, collective bargaining was not one of them. However, if the occasion arose, we presume collective bargaining would be entailed.

"There appears to be nothing different in this guild in comparison to the various medical societies and organizations now in existence except that this is called a guild," said Dr. G. Dan Delprat, president of the San Francisco County Medical Society.

"As for collective bargaining—if and when it became necessary—the San Francisco County Medical Society has done some collective bargaining. This was when we had objected to the way the health service operated and we advocated that the system be changed."

Officers of the guild include Dr. James Guilfoil, president; Dr. Edmund J. Morrissey, vice-president; Dr. Robertson Ward, secretary; Dr. Wilber F. Swett, treasurer, and as directors, Drs. Thomas E. Gibson, James J. McGinnis, Vance M. Strange and John Jay O'Connor.—San Francisco *Examiner*. (For editorial comment, see p. 57.)

U. S. Traffic Death Toll Hits 11,160

Chicago, July 29.—(AP)—The nation's traffic death toll of 1,920 for June raised to 11,160 the total for the first six months of this year, the National Safety Council reported today.

The six-month figure was 1 per cent below the same period last year but 10 per cent higher than in 1943.

The June deaths figured 11 per cent more than in the same month last year and 14 per cent greater than June, 1943. Mileage in May, the council said, was between 4 and 5 per cent over May, 1944.—Los Angeles *Times*, July 30.

California Federation of Business and Professional Women Urges Study of State Health Plan

"The average woman does not know enough about the provisions of her insurance and social security," according to Mrs. Helen Matlock, who is spearheading the campaign of "Educate—Not Legislate" for California Federation of Business and Professional Women. Mrs. Matlock, president of the local B.P.W. Club and legislative and political chairman for the State group of 10,000 women, is largely responsible for the committee of five to be appointed within the next few days by the State president, Miss Ethel M. Johnstone of San Francisco.

The committee will study provisions of pending legislation affecting health and insurance in California and be

prepared to express an intelligent opinion on the measures when the special session of the legislative convenes next January.

"The intense feeling aroused by Governor Warren's proposed health bills in the recent sessions showed how deeply concerned the people are over anything that affects their health," Mrs. Matlock pointed out.

"Yet most of them know very little about the laws that govern our insurance and hospitalization. Our job as a federation should include a thorough study of the existing laws and proposed bills, followed by a poll of our members so that next year we can say to our representatives: 'Here is what 10,000 women want in the way of health legislation.'"

"Most of the federation members are employed women, and that means that the provisions of the social security laws are of vital importance to them," Mrs. Matlock stated.

She is asking for another committee of five women from all parts of the State to study the status of social security laws, especially as they affect women, and to report their findings to district and local clubs. . . .—Sacramento Union, July 22.

MEDICAL JURISPRUDENCE†

HARTLEY F. PEART, Esq.
San Francisco

Evidence of Malpractice

The case of *Dixon v. Norberg* (157 Pac. 2d 131), decided March 12, 1945, by the Supreme Court of Colorado, illustrates the very slight evidence which will justify submission of a malpractice case to a jury for decision, and will support a verdict against a defendant physician and surgeon.

In the *Dixon* case the undisputed testimony disclosed that the plaintiff, while eating, swallowed a small pork bone, which became lodged in her throat, and caused such distress that she visited the defendant physician's office immediately, with her husband, for treatment.

There the defendant, after making two unsuccessful attempts to remove the bone by means of an instrument carrying a piece of surgical cotton on it, told plaintiff that he could do nothing more for her and that she should consult a specialist. He then called another physician, who instructed him to take x-rays, which he did, and then sent plaintiff to the specialist. This physician, by means of an esophagoscope, removed the bone. He first located some cotton on the left side of the esophageal wall. This cotton was on the pork bone, and when the cotton was removed the bone came with it. Subsequent examination disclosed a tear in the esophageal wall. No damage was occasioned by use of the esophagoscope itself.

As a result of the tear in the esophagus plaintiff became seriously ill and brought this action against the defendant for malpractice, alleging that he had treated her negligently in attempting to remove the bone, thus injuring the esophageal wall.

Defendant testified that when plaintiff consulted him he detected a foreign body in her throat, and, by means of a laryngeal forceps with a piece of surgical cotton on the end, he tried to wipe this foreign body from the throat with a sweeping motion from below upward. Being unsuccessful, he called the specialist, who was ultimately successful in removing the bone. The defendant stated positively that he did not insert the forceps down the esophagus of the plaintiff to the point where the specialist testified the pork bone was located, and that it would have been physically impossible to have done so.

† Editor's Note.—This department of CALIFORNIA AND WESTERN MEDICINE, presenting copy submitted by Hartley F. Peart, Esq., will contain excerpts from the syllabi of recent decisions, and analyses of legal points and procedures of interest to the profession.

Another physician, called by defendant as a witness, testified that the method used by defendant was approved in the general practice of medicine in the community.

Plaintiff testified that the defendant did put the forceps down her throat, and that she felt a sharp pain, and that immediately afterwards there was some hemorrhage.

There was medical testimony to the effect that the cotton might have been swallowed by plaintiff in the operations heretofore discussed, and in its journey down the esophagus, have come in contact with the bone and adhered thereto. It was also testified that the adherence of the cotton to the bone was so firm that the impact between the bone and the cotton must have been with more force than that involved in the act of swallowing. Although defendant testified that plaintiff complained of the foreign body being in the upper reaches of her throat, the specialist testified that when defendant telephoned him he had stated that the patient in the office had a bone in her esophagus.

Other medical specialists called by plaintiff, contrary to the testimony of defendant's witness, stated that the manner in which defendant probed for the bone in the esophagus was not good practice considering "the present standards in the profession for a general practitioner."

The jury rendered a verdict for the plaintiff in the sum of \$7000.00.

On appeal the principal question presented to the court was whether there was sufficient competent evidence in plaintiff's favor to warrant submission of the case to the jury. The court held that here there was a conflict in the testimony which warranted its submission to the jury, and the evidence in plaintiff's favor was sufficient to justify the verdict rendered.

The court approved the following instruction given to the jury by the trial court:

"You are instructed that in judging the proper degree of skill to be exercised by a physician or surgeon in any given case, regard is to be had to the advanced state of the profession at that time, and that a physician or surgeon by holding himself out to the world as such impliedly contracts that he possesses the reasonable degree of skill, learning and experience which good physicians and surgeons of ordinary ability and skill, practicing in similar localities, ordinarily possess, and that he will use his skill with ordinary care and diligence according to the circumstances of the case, and if you find that the defendant in this case did not use ordinary care and diligence then you will find for the plaintiff."

The Supreme Court, therefore, considered the testimony offered on behalf of plaintiff sufficient to establish a departure from the standard of care or degree of skill which justified a verdict against the defendant for malpractice.

LETTERS†

Concerning C. and W. M. article on "Black Widow Spider":

(COPY)

SIMMONS-BOARDMAN PUBLISHING CORPORATION

Chicago, Ill., 14 July 1945.

To the Editor: I am writing to you at the suggestion of the American Medical Association to ask if I may quote two or three paragraphs from an article which appeared in the November, 1935, issue of CALIFORNIA AND WESTERN MEDICINE.

The article in question deals with the Black Widow spider (*Lactrodetus mactans*), and was written by Dr. Russell M. Gray of Indio, California.

† CALIFORNIA AND WESTERN MEDICINE does not hold itself responsible for views expressed in articles or letters when signed by the author.

If I am granted permission to use this material, I intend to incorporate it in an article I am writing on the Black Widow spider for one of the outdoor sports magazines. I should inform you that my article does not pretend to be the least bit technical, but instead attempts to acquaint outdoor men and women with the appearance of the spider and the location in which it is most likely to be found.

The section from which I would like to quote various paragraphs concerns Case No. 4, and also the "comment" which followed a report on that case.

Needless to say, full credit will be given in my article for any material I am permitted to use from your journal.

Yours very sincerely,
(Signed) H. E. MEASON,
Associate Editor.

Concerning Dr. L. J. Regan's article on "Malpractice Actions":

(COPY)

THE CONNECTICUT STATE MEDICAL JOURNAL
New Haven, July 16, 1945.

To the Editor: We would like very much to reprint an article by Dr. L. J. Regan on Malpractice Actions, which appeared in the February, 1945, issue of your journal, and I am writing to ask permission to do this. We will, of course, give you full credit for the original publication. (Ed. Note.—Permission to reprint was given.)

Very truly yours,
(Signed) HERBERT THOMS, M.D.,
Editor.

Concerning Reaction of an Over-Seas C.M.A. Member to Proposed Compulsory Sickness Insurance Bills:

25 June, 1945.

To the Editor: Please allow me to congratulate the California Medical Association for having waged such a successful fight against Compulsory Health Insurance. The Association has earned and won the undying gratitude of every physician in the Armed Service. To see such a united front presented by the Association in these days of great stress is indeed gratifying. . . .

It is indeed heartening to those of us so far from home to know that the California Medical Association has spoken as one voice and has proclaimed to the social planners and to the world that the enemies of scientific medicine who continue to dissipate their energies in the persistent espousal of lost causes, will not be able to use California as a proving ground for any crackpot schemes that have to do with the care of the sick.

It has long been a source of interest to me that the reformers who have invariably made failures of their own endeavors have always been the first to take up the cudgels in order to assist someone else to achieve the more abundant life.

I am at this very moment en route from a visit to a foreign country which has had Socialized Medicine for years—a country which by virtue of its compactness and homogeneous population should be ideal for this type of medical practice.

My one regret is that Governor Warren, whose sincerity I have never questioned, could not have accompanied me.

Here could be seen Socialized Medicine as it *really* is—not as the politicians and social planners who have come to know more about medical practice than the doctors themselves, would have you believe, but how it is actually looked upon by patients and physicians alike. First of all, the patients do not like it and the doctors

do not care, because they are all government employees and are not by any means a progressive type of medical man. If any specialized care were needed they availed themselves of the American doctors in the Army Hospital.

In the best civilian hospital the equipment was about what would be found in a small town American Hospital in the year 1910. An American Army doctor had come down several weeks previously and put a body cast on a patient and this procedure was of sufficient magnitude in the minds of the hospital personnel to still be the principal topic of conversation.

The better accommodations consisted of small rooms just large enough for two beds and room to walk between them. A large crust of bread thrown carelessly on a little stand at the head of each bed for the patients to gnaw on between meals bore mute evidence of the lack of finesse and adequate nursing facilities in this, their leading hospital.

What a garish contrast this picture presents between the best hospital available in a country with Socialized Medicine and our own magnificent American hospitals to which poor and rich alike may have access by paying a pittance in the form of Voluntary Hospital Insurance.

But this is not the real tragedy, because perhaps a crust of bread and a little less hospital luxury might have a salutary effect upon a great mass of pampered Americans. The real tragedy is the same tragedy that will befall America, not with the advent of Socialized Medicine, but will follow inevitably in its wake. I refer to the inferior caliber of medical men content to work under such a system. Here is a glaring example of a high grade American doctor, a product of free enterprise in a free America, whose ideals which we are supposed to be fighting to preserve, being called to a hospital to apply a body cast, simply because the political doctors had not had sufficient training to perform this elementary procedure.

So it is easy to see that what at first might be a pleasant rarity may soon become an opulent curse. Less than one generation under Socialized Medicine will lower the caliber of our medical men in these United States to the level just described, and let me say to the politicians and social planners who are attempting to foist this diabolical scheme on the American people that subsequent years will prove only too eloquently the justice of my belief. . . .

Of course the fight is far from won and there is no room for complacency. . . .

I cannot refrain from reminiscing for a moment and looking back up the avenues of time to the autumn of 1933 and the Annual Meeting of the American College of Surgeons in Chicago. The late Dr. J. Bentley Squier of New York who was president of the College presented a most eloquent and scholarly retiring address. He spoke of the unforeseen machinations that might endanger the high class system of medical practice as we know it today and sounded a warning note against Socialized Medicine when he said: "To be merely a cog in the wheel of a great machine can never be the ambition of those who have raised Medicine to its present high position or of those who have carried it onward."

He stated further that: "Any system which tends to lessen individual initiative cannot be the system which in the end will most stimulate scientific progress."

And in this connection with the stirring words of J. Bentley Squier still ringing in my ears an interesting thought comes into my mind. That thought is that the politicians, social planners and Doctors of Philosophy who have come to look upon themselves as better custodians of the people's health than the Doctors of Medicine who have performed this function so admirably for more than two thousand years, will not have to wait a

generation to put an inferior type of medical man into their socialistic scheme for political medicine. . . .

Of course the politicians, the Doctors of Philosophy and the social planners are fully conversant with all of this. It is up to Scientific Medicine to see that the victims of this diabolical scheme, namely the people of California and the nation are equally conversant. . . .

For the untiring efforts of the California Medical Association in behalf of Scientific Medicine the Medical men of the Armed Forces salute you.

I have every confidence that with your unfaltering assiduity for work the people of California will be duly informed as to the facts about Socialized Medicine in all of its pristine glory. . . .

With kindest personal regards, I am

Respectfully yours,

(NAME)

Fleet Post Office,
San Francisco, California.

Alabama's Venereal Disease Program

An article by June Stafford in "Science Service" gives the following information:

For 45 days, Birmingham, Alabama, recently was the focal point for the first step in an unique mass attack on syphilis and gonorrhea launched by the State of Alabama.

The campaign, which started off with a survey in Birmingham and Jefferson counties May 15-June 30, was originated when the Alabama State Legislature, at the instigation of State Senator Bruce Henderson, Wilcox County plantation owner, passed a law requiring all persons in the State between the ages of 14 and 50 to have a blood examination, and those having syphilis to get treatment either from a physician or free through the State Health Department. Huge posters lined the streets of cities in the two counties:

"Penicillin Cures Gonorrhea (The Great Crippler and Sterilizer) in Four Hours."

"Syphilis Can Be Treated with Penicillin in Nine Days." Other messages point out that the penicillin is free.

The campaign was held with the aid of the U. S.

Public Health Service, which developed the techniques and supplied equipment adequate for such a large-scale task. . . .

To make the blood tests on every 14-to-50-year-old in Birmingham and Jefferson county (there are 300,000 of them), teams of skilled blood-testers were sent down from the U. S. Marine Hospital at Staten Island.

"Willow Run" was the name they gave to the blood-test laboratory set up here—the world's largest—because of the volume of work done and the assembly line procedure.

Physically, the laboratory was not so large. But it was equipped and staffed to make 20,000 blood tests a day. At the start of the campaign, when only 5,000 tests were being done daily, the staff had finished work by 2 p.m. Working at a snail's pace, the skilled blood-testing teams could each do 3,200 tests a day. By the end of the second week of the campaign, 95,600 blood samples had been tested for syphilis. . . .

Honoré de Balzac (1799-1850).—In his mode of living Balzac followed a strict but unwholesome régime during periods of literary production. He ate little, chiefly fruit; he drank strong coffee and Vouvray wine. Rest and relaxation were limited to five or six hours of sleep, and an hour's bath daily. Little wonder that such constant strain broke his physical endurance. Had he been as much devoted to Hygeia as to the literary Muse, his working life might have been lengthened—yet he produced ninety-seven volumes of imperishable prose in twenty years.—Warner's *Calendar of Medical History*.

Ludwig van Beethoven (1770-1827).—The tragic ear disease that affected Beethoven first appeared at 26 and became progressively worse, until at 44 he could no longer hear the orchestra he was conducting. Beethoven, desperate at first, railed against his fate and even contemplated suicide. But as the tumult within him died, his musical genius triumphed. Some of his finest symphonies were written while he was totally deaf. And though Beethoven suffered much pain and misery in his life, his noble music is for the most part serene and optimistic.—Warner's *Calendar of Medical History*.

(COPY)

Communicable Diseases—Incubation Periods

Morbidity and Mortality Report—From the Department of Health, City of Los Angeles

NAME OF DISEASE	INCUBATION PERIOD FOR COMMUNICABLE DISEASE
Chancroid.....	1 to 10 days, usually 3 to 5 days.
Chickenpox.....	2 to 3 weeks.
Diarrhea of the Newborn, Epidemic.....	2 to 21 days, most frequently 6 to 7 days.
Diphtheria.....	Usually 2 to 5 days.
Dysentery, Bacillary.....	1 to 7 days, usually less than 4 days.
Food Infections (Salmonellosis).....	6 to 48 hours, usually about 24 hours.
Food Poisoning (Bacterial Intoxications).....	½ hour to 4 hours, usually 2 to 4 hours.
Botulism.....	18 to 36 hours.
German Measles.....	14 to 21 days, usually about 16 days.
Gonorrhea.....	1 to 8 days, rarely longer, usually 3 to 5 days.
Hemorrhagic Jaundice.....	4 to 19 days, average 9 to 10 days.
Influenza.....	Short, usually 24 to 72 hours.
Lymphogranuloma Venereum.....	1 to 4 weeks. Glandular enlargement appears in from 10 to 50 days.
Measles (Rubeola).....	About 10 days from date of exposure to onset of fever; 13 to 15 days until rash.
Meningococcus Meningitis.....	Generally considered to be 2 to 10 days, usually 7 days.
Mumps.....	From 12 to 26 days. 18 days accepted as usual.
Paratyphoid Fever.....	1 to 10 days; somewhat longer for paratyphoid A fever than B or C.
Pertussis (Whooping Cough).....	Commonly 7 days, almost uniformly within 10 days and not exceeding 21 days.
Pneumonia.....	Believed to be short, usually 1 to 3 days, not well determined.
Poliomyelitis.....	Considered to be 7 to 14 days.
Rabies.....	Usually 2 to 6 weeks. May be prolonged to 6 months or even longer.
Typhus.....	From 6 to 15 days, commonly 12 days.
Smallpox.....	7 to 16 days, commonly 12 days. May be 21 days.
Scarlet Fever.....	Short, usually 2 to 5 days.
Syphilis.....	About 3 weeks, minimum 10 days, occasionally 6 weeks or longer.
Tetanus.....	Commonly 4 days to 3 weeks, dependent somewhat upon the character, extent and location of the wound. Longer periods of incubation have been noted.
Trichinosis.....	Usually 6 to 7 days after ingestion of infective meat. G.I. symptoms may appear in 24 hours.
Typhoid Fever.....	From 3 to 38 days, usually 7 to 14 days.
Undulant Fever.....	8 to 30 days or more.

TWENTY-FIVE YEARS AGO†

EXCERPTS FROM OUR STATE MEDICAL JOURNAL

Vol. XVIII, No. 8, August, 1920

EXCERPTS FROM EDITORIAL NOTES

Health Insurance and Physicians.—Under the title above, there has been issued a pamphlet written by Dr. Frederick R. Green, secretary of the Council on Health and Public Instruction of the American Medical Association, which embodies the best formulation of principles on this topic which we have yet seen. . . .

We believe it self-evident that adequate medical service, in the sense which has many times been defined in these columns, is the right and due of every person in this country. We believe it is also self-evident that such service cannot be provided unless some one pays the bill. Good medical service costs money and must be paid for. One expedient suggested to make such service available for the large class of population which needs it most, is compulsory social insurance. It is a poor crutch and better are in sight, to be sure. But the purpose of social insurance is strictly and avowedly medical. . . .

Disagreement with the beginning argument of Dr. Green does not in any wise decrease our thorough accord with his conclusions nor does it lessen our hearty endorsement of his statement of the five alternatives besides compulsory health insurance, all better adapted to meet the problem that compulsory health insurance seeks imperfectly to meet. These alternatives are as follows:

1. Provision of a living and adequate wage.
2. Prevention of preventable disease by public health agencies, thus lightening the individual burden of sickness.
3. Development of individual thrift and savings to provide for a rainy day.
4. Development of voluntary industrial insurance in groups by employers and employees. This is a practical and efficient and coming method.
5. Development of voluntary benefit associations. . . .

Politics and Health.—It is unnecessary to state to those readers of the JOURNAL who are members of the State Medical Society that this JOURNAL is non-partisan and non-political and that it never appraises men or measures from the partisan standpoint but from the standpoint of public welfare.

An opportunity was given to the two great political parties, both of which claim to be devoted to the public welfare, to pronounce upon the subject of Public Health, which is the most vital question to the progress of the people individually and collectively.

The Republican party held its convention first this year and adopted a set of principles on which it seeks the endorsement of the voters. The platform of the Republican party on which it appeals to the people of the United States to entrust it with power at the coming November election contains the following health plank: . . .

We regret that the Democratic party at its National Convention in San Francisco failed to recognize the obligation of a great party to foster and further public health work. . . .

(Continued from Front Advertising Section, on Page 7)

† This column, compiled by the undersigned, strives to mirror the work and aims of colleagues who bore the brunt of Association activities some twenty-five years ago. It is hoped that such presentation will be of interest to both old and new members.

Historical reminiscences, papers and other archives will be welcomed by the C.M.A. Committee on History, to whom such should be sent. Address same to the Committee's Secretary, Dr. George H. Kress, Room 2004, 450 Sutter, San Francisco, 8.

BOARD OF MEDICAL EXAMINERS OF THE STATE OF CALIFORNIA†

By F. N. SCATENA, M. D.
Secretary-Treasurer

Board Proceedings

The Board of Medical Examiners at its regular meeting held in San Francisco July 9 to 12, 1945, took the following actions in regard to the status of licentiates:

The license of Dr. John J. L. Doyle was restored on July 9, 1945, and he was placed on probation for five years, without narcotic privileges, and with the proviso that he report to the Board once annually.

The certificate of Dr. Milton S. McMurtry was restored on July 9, 1945, and he was placed on five years' probation, to abide by all laws and report annually to the Board.

Dr. Samuel Joshua Apfel's California license was revoked under Section 2363 of the Business and Professions Code, because of revocation by another state. Said action was taken on July 10, 1945.

After a hearing on charges of violation of Section 2390 and 2391, Dr. James A. Hadley was placed on five years' probation without narcotic privileges and to report annually to the Board.

Dr. Benjamin F. Johnson's California license was revoked on July 10, 1945, under Section 2362 of the Business and Professions Code, revocation by another State Board.

Dr. Richard E. Orme was on July 10, 1945, placed on one year probation for alleged violation of Section 2392 of the Business and Professions Code, aiding an unlicensed practitioner.

News

"Dr. Wesley L. Ricker, 43, of Fresno, was arrested at Weed, Thursday, and brought to the county jail here by Sheriff Ben Richardson on charges of practicing without a license. The defendant was out of jail Friday on \$1,000 bail." (Yreka News, May 11, 1945.)

"One of the nation's largest abortion mills was disclosed today by detectives with the arraignment of Hester Ann Hesketh, 50, on a charge of murder in connection with the death of a young navy wife. Chief of Detectives L. Q. Martin said Mrs. Hesketh admitted she performed 30 to 35 abortions a week for the past two years, or a total of more than 3,000 cases. . . . Mrs. Hesketh who talked freely to officers, was quoted as saying she had been performing abortions since coming to California 18 years ago. Her fees ranged from \$25 to \$75. She said she did not know her type of abortion could be fatal, and claimed Mrs. Reeves was the only patient to die. Most of her patients here, she said, were women with husbands in the armed services. She denied having any outside connections." (Los Angeles Herald and Express, June 12, 1945, from United Press dispatch, Long Beach, June 12.)

"Dr. Herman Benjamin Misch, whose license to practice was revoked last March on charges that he had performed an abortion, has demanded reinstatement by the State Board of Medical Examiners in a petition for a writ of mandate on file in Superior Court. Through

(Continued in Front Advertising Section, on Page 17)

† The office addresses of the California State Board of Medical Examiners are printed in the roster on advertising page 6. News items are submitted by the secretary of the board.